

# Inventory of Amphibians and Reptiles at Mojave National Preserve

## Final Report

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Sidewinder on Kelso Dunes, Mojave National Preserve (TBP photo).

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## ABSTRACT

As part of the National Park Service Inventory and Monitoring Program in the Mojave Network, we conducted an inventory of amphibians and reptiles at Mojave National Preserve in 2004-2005. Objectives for this inventory were to use fieldwork, museum collections, and literature review to document the occurrence of reptile and amphibian species occurring at MOJA. Our goals were to document at least 90% of the species present, provide one voucher specimen for each species identified, provide GIS-referenced distribution information for sensitive species, and provide all deliverables, including NPSpecies entries, as outlined in the Mojave Network Biological Inventory Study Plan. Methods included daytime and nighttime visual encounter surveys and nighttime road driving. Survey effort was concentrated in predetermined priority sampling areas, as well as in areas with a high potential for detecting undocumented species. We recorded 31 species during our surveys. During literature review and museum specimen database searches, we found records for seven additional species from MOJA, elevating the documented species list to 38 (two amphibians and 36 reptiles). Based on our surveys, as well as literature and museum specimen review, we estimate an overall inventory completeness of 95% for Mojave National Preserve herpetofauna; 67% for amphibians and 97% for reptiles.

**Key Words:** Amphibians, reptiles, Mojave National Preserve, San Bernardino County, California, Mojave Desert, inventory, NPSpecies.

## INTRODUCTION

In fiscal year 2000, the National Park Service (NPS) received a substantial budget increase for inventory and monitoring studies. At that time, a nationwide program to inventory vertebrates and vascular plants within the National Parks was initiated. As part of this new inventory effort led by the NPS Inventory and Monitoring program, a total of 265 National Park units (e.g., parks, monuments, recreation areas, historic sites) were identified as having significant natural resources, and these were divided into 32 groups or “networks” based on geographical proximity and similar habitat types. The Mojave Network (MOJN) consists of seven NPS units in the Mojave and Great Basin biomes: Death Valley National Park (DEVA), Great Basin National Park (GRBA), Joshua Tree National Park (JOTR), Lake Mead National Recreation Area (LAME), Manzanar National Historic Site (MANZ), Parashant National Monument (PARA), and Mojave National Preserve (MOJA). A biological inventory study plan was developed for the Mojave Network (NPS 2001), and MOJA identified inventory of reptiles as a high priority. A preliminary NPS assessment of inventory completeness indicated that approximately 87% of the potentially occurring reptile species had been verified. Although only a few amphibian species (only one native) have been recorded from MOJA, we included them in our surveys and data mining efforts, in order to produce a comprehensive assessment of both amphibians and reptiles in the Preserve.

Park managers identified priority sampling areas for both amphibians and reptiles, focusing on areas that lacked adequate baseline information on species occurrence, had a high potential for increasing the park species list, or were of special management concern. These areas included the Clark Mountain Range, the Piute Range, and two perennial streams within MOJA. One of these,

Piute Creek, drains the eastern side of the Piute Range. The other, Cornfield Spring, occurs on the western flank of the Providence Mountains.

Objectives for this inventory were to: 1) inventory and document the occurrence of reptile and amphibian species occurring at MOJA, including within priority sampling locations, with the goal of documenting at least 90% of the species potentially present; 2) document (through collection or museum specimen and literature review) one voucher specimen for each species identified; 3) provide a GIS-referenced list of sensitive species that are known to be federally or state listed, rare, or worthy of special consideration that occur within the Preserve; 4) describe park-wide distribution of federally- or state-listed, rare, or special concern species; 5) draw conclusions based upon data obtained for consideration in future inventory or monitoring; 6) enter all species data into the National Park Service NPSpecies database; and 7) provide all deliverables as outlined in the Mojave Network Biological Inventory Study Plan.

## STUDY AREA DESCRIPTION

Mojave National Preserve was established in 1994 as part of the California Desert Protection Act, when land formerly managed by the Bureau of Land Management as the East Mojave National Scenic Area was transferred to the NPS. MOJA encompasses 643,387 ha (1,589,165 acres) in eastern San Bernardino County, California (NPS 2000). Elevations range from 284 m (932 ft) at Soda Lake to 2417 m (7929 ft) on the summit of Clark Mountain (Stoffer 2004). The Preserve is more or less bisected by an interconnected series of southwest-northeast trending mountain ranges (Granite, Providence, Mid Hills, and New York Mountains). Much of the higher elevations (above 1,675 m or 5,500 ft) of these mountains, as well as of the Clark Mountain Range, consist of pinyon-juniper woodland (Stoffer 2004, Thomas et al. 2004). Adjacent to these and other, smaller ranges are broad, flat valleys dominated by creosote bush (*Larrea tridentata*), with extensive bajadas of mixed cactus-yucca scrub or Joshua tree (*Yucca brevifolia*) woodland (Thomas et al. 2004). The Cima Dome region in the northern part of the Preserve contains one of the densest and most extensive Joshua tree forest in the world (NPS 2000). Other prominent features in the Preserve include Soda Dry Lake, cinder cones and lava fields, and the extensive dune fields of Kelso Dunes and Devil's Playground. MOJA contains a number of springs, two of which (Piute Spring and Cornfield Spring) give rise to perennial streams. Many canyons and washes have flowing water in spring following winters of adequate rainfall, and some of these (e.g., Bull Canyon in the Granite Mountains) retain standing water in *tinajas* year-round. Mean annual precipitation varies from as much as 25 cm (10 in) in the mountains to less than 5 cm (2 in) in the lowest elevations (Stoffer 2004).

## METHODS

### Sampling Design

The focus of the present MOJA amphibian and reptile inventory was very specific: to survey throughout the Preserve, especially in relatively unknown or sensitive areas, and to document the presence of suspected species. Given this, and based on results from previous herpetological inventories (e.g., Drost et al. 2001, Persons and Nowak 2006a), we used non-random, targeted sampling methods rather than randomized plots or transects. It is well known that unconstrained, targeted surveys are superior to randomized methods when trying to compile a herpetofauna species list (e.g., Campbell and Christman 1982, Karns 1986, Scott 1994, Turner et al. 1999). Much of our effort was focused in the previously identified priority sampling areas (above), but we also surveyed throughout the Preserve in an effort to describe the park-wide distribution of the herpetofauna.

### Field Methods

For this inventory, we used a combination of diurnal and nocturnal time-recorded visual encounter surveys (“general surveys”) and nighttime road driving. These methods are outlined below.

**Daytime General Surveys.** General surveys are a form of time-recorded visual encounter survey described by Crump and Scott (1994). During daytime general surveys we recorded the area searched (either with GPS points or written route descriptions, or both), start and stop times, weather conditions (temperature, cloud cover, wind, relative humidity) at the beginning and end of each survey, and observations of all amphibians or reptiles encountered during the survey. These surveys varied from short duration searches of specific habitats (e.g., springs, abandoned structures) to all-day hikes over extensive areas (e.g., long canyons).

**Nocturnal General Surveys.** Nocturnal general surveys were conducted in the same manner as daytime general surveys, except that they occurred at night with the aid of flashlights. These surveys included an aural component (i.e. listening at potential breeding locations for calling amphibians), as well as visual searches of pools and streams for tadpoles and egg masses.

**Nighttime Road Driving.** Driving slowly on roads at night and carefully scanning the road in the headlights of the vehicle is recognized as an excellent method for surveying some groups of reptiles, particularly snakes (e.g., Klauber 1939, Mendelson and Jennings 1992, Rosen and Lowe 1994). We standardized these surveys by driving a vehicle at slow speeds (20-30 km per hour) on both paved and good dirt roads within MOJA, identifying all amphibians and reptiles encountered to species and recording if they were either alive on the road (AOR) or dead on the road (DOR). We sexed and aged individuals when possible and recorded locations to the nearest 0.1 mi using calibrated vehicle odometers. Locations of selected observations were also recorded using a GPS unit.

**Random Encounters.** Amphibians and reptiles seen during other than formal surveys (e.g., during daytime when driving between survey areas) were referred to as random encounters. As with the amphibians and reptiles seen or captured by the different sampling methods

described above, we recorded standard data on random encounters, including date, time, location, species, size or age class, and sex, as possible.

### **Spatial Data Collection**

In addition to written descriptions, many survey area locations were recorded using Garmin® hand-held GPS units (GPSIII Plus or Garmin 12), usually with an accuracy of 4-5 m. In addition, we recorded individual capture locations of some uncommon species. Although the Mojave I&M Network is trying to standardize all spatial data in the NAD83 datum, we used NAD27 in order to match the USGS topographic maps of MOJA. As with other field data, all spatial data were originally recorded in field notebooks before being entered into the Microsoft Access® database.

### **Voucher Specimens**

We salvaged several road-killed animals found in good condition. Collection locations for most specimens were recorded using GPS. Specimens were injected with and immersed in 10% formalin for fixing, then transferred to 70% ethanol for preservation, using standard techniques (e.g., Simmons 2002). These specimens have been deposited in the herpetology collection at the Natural History Museum of Los Angeles County. Each specimen has a field series tag, a data tag, and an NPS issue specimen tag containing information on species, collector, date of collection, collection site, and NPS (ANCS+) accession and catalog number.

### **Literature and Museum Specimen Review**

The primary published literature pertaining to herpetofauna of the MOJA area is Johnson et al. (1948). In addition to that monograph, we reviewed species-specific distribution literature (e.g., Bickett 1982, Bradley and Deacon 1966, DeLisle 1979, 1983, Lovich and Beaman in press, Lovich and Meyer 2002, Tanner 1966, Wood and Richmond 2003) relating to amphibians and reptiles within or near the Preserve. We also reviewed theses and unpublished reports on amphibians and reptiles at MOJA (Driscoll 1987, Hazard and Rotenberry 1996, Mitchell 1978, Moon 1988, Stein and Warrick 1979, Tate 1981, Ulmer 1983, Wallace 2003), and consulted with experts familiar with aspects of the MOJA herpetofauna. These experts included Jim Andre, Rob Fulton, Jeff Lovich, J. Robert Macey, Brian McGurty, William Presch, and Glenn Stewart. Contact information for these experts is presented in Appendix B.

For many years, Kent Beaman (Los Angeles County Natural History Museum) has been compiling a database of museum specimen records of amphibians and reptiles from all of Riverside and San Bernardino counties, California, and he graciously gave us access to that database for this project. It contains records from 21 institutional collections, as follows:

American Museum of Natural History (AMNH), Barrick Museum at University of Nevada Las Vegas (UNLV), Brigham Young University (BYU), California Academy of Sciences (CAS), Carnegie Museum (CM), Field Museum of Natural History (FMNH), Florida Museum of Natural History (no acronym), University of Kansas (KU), Los Angeles County Natural History Museum (LACM), Louisiana State University (LSU), Museum of Comparative Zoology (MCZ), Museum of Southwestern Biology (MSB), Museum of Vertebrate Zoology (MVZ), Oklahoma Museum of Natural History (OKMNH), San Bernardino Natural History Museum (SBNHM), San Diego Natural History Museum (SDNHM), University of Arizona (UAZ), University of California Santa Barbara (UCSB), University of Colorado Museum (UCM), University of Michigan Museum of Zoology (UMMZ), and United States National Museum (USNM). Standard

institutional codes follow Leviton et al. (1985). In addition, we reviewed online specimen records from Yale Peabody Museum (YPM). Finally, we examined the specimens maintained at the University of California's Sweeney Granite Mountains Desert Research Center (UCR-GMR), and Jim Andre provided us with the accompanying spreadsheet of collection data. From these sources we compiled a spreadsheet of museum specimens collected within (or in a handful of cases, near) what is now MOJA. These specimen records are presented in Appendix C. Additional data associated with many records (collector field numbers, measurements, etc.) can be found in the spreadsheet, delivered separately to the Mojave I & M Network. These and other records from some of these institutions are also available through the online HerpNet data portal (<http://herpnet.org>).

### Data Analysis

The effectiveness of the different sampling methods was evaluated by determining overall species richness and capture rate per unit effort for each of the sampling methods. The number of species or individuals captured per unit effort was calculated by dividing the number captured or sighted by the total effort for that method. We measured sampling effort for general surveys and nocturnal general surveys in person-hours, i.e., the number of hours spent surveying multiplied by the number of observers for any given survey. For night driving we measured effort both in person-hours and in total kilometers driven. Random encounters are not quantifiable in terms of effort, but they added important information for the development of the species accounts on the distribution and abundance of species within the Preserve.

To estimate inventory completeness, we developed a master list of species documented and potentially occurring at MOJA. Development of this master list was based on consultation of the literature, review of the NPSpecies database, personal knowledge of the distribution and habitats of southwestern amphibians and reptiles, data from selected museum collections, personal communications with other herpetologists that have worked in the MOJA region, and results of fieldwork from the 2004-2005 seasons. Because MOJA contains relatively few undocumented species, we did not attempt to weight these in our calculation of inventory completeness, as in other recent NPS herpetofauna inventories (Persons and Nowak 2004, 2006a, 2006b, 2006c). Instead, we simply divided the total number of documented species by the total number of documented + undocumented species, yielding a figure of percent inventory completeness.

In addition to the master list, we produced a species accumulation curve (e.g., Scott 1994) to evaluate inventory completeness. This curve is simply a graphical representation of the rate at which we added to the species list over the course of the entire inventory period.

### Data and Other Products

Data products delivered separately to the Mojave Inventory and Monitoring Network include 1) a Microsoft Access® database containing all field data on individual surveys and species observations; 2) updates of the NPSpecies and NatureBib databases for MOJA; 3) copies of field notes; and 4) photographs (35 mm color slides) of some survey areas and captured animals. Metadata for this inventory is being developed with the assistance of the data manager for the Southern Colorado Plateau Inventory and Monitoring Network (SCPN).

## Report Review

In addition to NPS review by Mojave I&M Network and MOJA staff, this report has undergone review in accordance with the USGS Fundamental Science Practices policy. This process consists of peer-review by topic experts, followed by policy approval at the Science Center and Regional levels.

## RESULTS AND DISCUSSION

### Overview of Inventory Results

We recorded 31 species (one amphibian and 30 reptiles) during fieldwork at MOJA in 2004–2005, and we documented 7 additional species based on our review of the literature and museum specimen records. Discussion of distribution and relative abundance of each species is found in the species accounts (Appendix A). Scientific and common names follow Stebbins (2003). Scientific names for all amphibian and reptile species mentioned in this report are presented in Table 1.

We recorded 1,913 individual amphibians and reptiles (not including tadpoles and egg masses) at MOJA. Of these, 1,397 (73%) were lizards, 308 (16%) were amphibians (all Red-spotted Toads), 193 (10%) were snakes, and 15 were turtles (Desert Tortoise; <1%). The most commonly observed species was the Side-blotched Lizard ( $n = 685$ ), accounting for 36% of all observations. The most frequently observed snake species was the Sidewinder ( $n = 37$ ), although a number of other species were also encountered frequently. A summary of the total number of each species observed by each method during this inventory is presented in Table 2. Complete data on all observations can be found in the accompanying Microsoft Access® database.

### Literature and Museum Specimen Review

The most comprehensive account of the herpetofauna of MOJA is Johnson et al. (1948), who recorded 29 species of amphibians and reptiles from the “Providence Mountains Area,” which included most of MOJA except the western and eastern edges (i.e., Soda Dry Lake, Piute Range). Species they failed to detect included Gila Monster, Western Blind Snake, Glossy Snake, Western Shovel-nosed Snake, Ring-necked Snake, Spotted Leaf-nosed Snake, Southwestern Black-headed Snake, Western Lyre Snake, and the introduced Pacific Treefrog (found only near Soda Lake). Although Johnson et al. (1948) do not detail their collecting methods many snakes were probably undetected because night driving was apparently not employed. Had it been, many species such as Glossy Snake, Western Shovel-nosed Snake, and Spotted Leaf-nosed Snake would undoubtedly have been found.

Another comprehensive, but unpublished, report on the herpetofauna of the East Mojave region is that of Brown (1976). Despite an exhaustive search, we were unable to locate this reference. Mitchell (1978) recorded 27 species from the Clark Mountain area, and provided data on habitat associations of each species. Stein and Warrick (1979) reported results of extensive surveys in the Granite Mountains, where they observed or collected 29 species and included an additional five species in their list based on previous records. Compared with the 38 species we document, the only species Stein and Warrick (1979) did not record were Pacific Treefrog (introduced in the pond at Zzyzx), Gila Monster, Ring-necked Snake and Long-nosed Snake. Tate (1981)

reported on herpetofauna surveys in and near the Kelso and Old Dad mountains, and recorded 28 species from the area. Highlights of their surveys included a Rosy Boa near Kelso Peak and five Western Ground Snakes, a species that is known from very few specimens throughout MOJA. Ulmer (1983) reported results of a pitfall trapping survey of Piute Creek. Driscoll (1987) studied the herpetofauna of the upper elevation plateaus in the Granite Mountains. She did not record any new species, but did extend known local elevation limits for many. Hazard and Rotenberry (1996) reported on transect surveys at both perennial streams in MOJA, Piute Creek and Cornfield Spring. Wallace (2003) captured 16 reptile species in pitfall traps at the Desert Studies Center on the west side of Soda Dry Lake. An annotated species list for the Providence Mountains (Moon 1988) contains little original data.

We also consulted literature on distribution of individual species at MOJA. Wood and Richmond (2003) report a new locality (Pachalka Spring) for Ring-necked Snake, and Greene and Luke (1996) discuss the possibility of numerous undocumented species occurring in the higher mountains within MOJA. Most of the species-specific distributional literature in the MOJA region concerns the Gila Monster (Bicket 1982, Bradley and Deacon 1966, DeLisle 1979, 1983). Lovich and Beaman (in press) review all records of Gila Monsters in California, many of which are from within MOJA.

We compiled a spreadsheet of 1,723 museum specimen records of amphibians and reptiles collected from MOJA (Appendix C). The vast majority of these were taken from Kent Beaman's database of San Bernardino County records. Without access to this database, we could not have compiled such an extensive and thorough museum specimen list within the time and budgetary constraints of the project. As a result, almost all species potentially occurring at MOJA are known to be documented with museum specimens; the remaining species are very hypothetical (they may not occur within the Preserve at all) and almost certainly voucher specimens do not exist anywhere.

### **Sampling Effort and Efficacy of Methods**

We spent approximately 312 person-hours on 63 days surveying for herpetofauna at MOJA in 2004-2005. Methods used, and number of person-hours spent on each method, included general surveys (192 person-hours), nocturnal general surveys (4 person-hours), and night driving (116 person-hours). We drove approximately 3,847 km during night driving surveys. Finally, we recorded species observations (one or more individuals per observation) during 123 separate random encounters. A summary of effort, including both actual survey time and total person-hours for most methods, is presented in Table 3.

Much of our survey effort was focused in priority sampling areas identified at the start of the inventory. We conducted general surveys in the Clark Mountains (23 surveys), the Piute Range (9 surveys), Piute Creek (12 surveys), and at Cornfield Spring (8 surveys). Some of our night driving surveys were also conducted in the Clark Mountains and Piute Creek areas. Many of our surveys, including within priority sampling areas, were focused on habitats potentially occupied by Gila Monsters. We also surveyed multiple sites within the Granite, Kelso, Mid Hills, New York, and Providence Mountains, and within Kelso Dunes. Because of the extensive network of paved and graded dirt roads within MOJA, most regions and habitats within the Preserve were

surveyed multiple times during night drives. Complete data on all surveys can be found in the accompanying Microsoft Access® database.

The most species detected by a single method was 26, during general surveys, and we recorded 16 species during night driving surveys (Table 2). Taken together, these two methods recorded 30 of the 31 species documented during this inventory. This result is consistent with those of amphibian and reptile inventories at Petrified Forest National Park (Drost et al. 2001) and Wupatki National Monument, Arizona (Persons 2001, Persons and Nowak 2006a), in which the combination of daytime general surveys and night driving resulted in inventory completeness of >90% at both parks (unpublished data). Nocturnal general surveys at MOJA recorded only one species, the Red-spotted Toad. We recorded 24 species during random encounters, including one species (Common Kingsnake) not found by other methods.

Observation rate (individual animals detected per person-hour) of all amphibians and reptiles was 7.68 for general surveys, 12.4 for nocturnal general surveys (only Red-spotted Toads), and 1.27 for night driving.

Road driving observation rates are usually reported as individuals observed per distance driven (e.g., Klauber 1939, Rosen and Lowe 1994). For all species, we recorded observation rates of 3.82 individuals per 100 km driven during night driving. However, the primary focus of night driving surveys was to find snakes. Considering only snakes, night driving recorded 2.96 individuals per 100 km. Although lower than Klauber's (1939) figure of 7.7 snakes/100 km reported for the Anza-Borrego Desert region of southern California, these figures are comparable to other, more recent studies in the Southwest, such as Persons (2001; 1.76 snakes/100 km) and Rosen and Lowe (1994; 2.37 snakes/100 km).

### **Road Mortality of Snakes**

Because MOJA contains extensive paved, high-speed roads that pass through the Preserve, road mortality of animals is a concern. Many of the roads within MOJA have been paved only in the past few decades, and snakes may be less common now compared with the 1970's and 1980's (Rob Fulton and William Presch, personal communication). Many studies have reported the ratio of snakes found dead on the road (DOR) to those found alive on the road (AOR). Of the 114 snakes recorded during night driving surveys at MOJA, 44 (39%) were found DOR. Of comparable studies in the Southwest, Klauber (1939) recorded 24% DOR during nighttime surveys in the Borrego region of southern California, Price and LaPointe (1990) reported 44% DOR in southern New Mexico, Persons (2001) reported 47% DOR at Wupatki National Monument in northern Arizona, Sullivan (2000) reported 56% DOR in central California, and Rosen and Lowe (1994) reported 72% DOR at Organ Pipe Cactus National Monument in southern Arizona. These data should be interpreted with caution as many factors influence DOR/AOR ratios, including scavenging rates (e.g., Kline and Swann 1998, Rosen and Lowe 1994) and relative intensity of snake activity during survey times. Still, when comparing between similar habitats (with similar snake faunas) and using similar survey methods DOR/AOR ratios can be used as a rough index of the intensity of road mortality.

Although our sample sizes are small, it is interesting to determine the localized mortality rates of snakes found during standardized night driving surveys on separate road sections within MOJA.

As expected, percent DOR is higher on more heavily traveled roads. For example, percent DOR on Morningstar Mine Road, Kelso-Cima Road, and the portion of Kelbaker Road south of Kelso is a combined 66% (N=50). This route is commonly used as a cutover between Interstate 15 and points south of Interstate 40, and traffic is especially heavy on weekends (personal observation) as southern Californians head to and from Las Vegas. In contrast, the long section of Kelbaker Road between Baker and Kelso had a percent DOR of only 17% (N=29). An even starker contrast is shown by simply comparing the section of Kelbaker Road north of Kelso (17% DOR) to the section south of Kelso, which had a DOR rate of 73% (N=30). This figure is almost identical to the 72% DOR reported by Rosen and Lowe (1994) for Route 85 in Organ Pipe Cactus National Monument. Rosen and Lowe (1994), using a larger dataset than we have, estimated that roughly 1,000 snakes a year were killed on their 44 km transect, or about 23 snakes per km per year. Rosen and Lowe (1994) suggested that the road in Organ Pipe may be acting as a population sink for some snakes, most notably the Rosy Boa, a relatively large, slow-moving species that is especially vulnerable when crossing roadways. Rosy Boas inhabiting the rocky foothill areas of the Granite and Providence Mountains could be impacted by road mortality where these habitats meet in the Granite Pass area, along the busy southern section of Kelbaker Road. If populations near Kelbaker Road were severely reduced or eliminated, as they appear to have been near Route 85 in Organ Pipe (Rosen and Lowe 1994), gene flow between populations in the Granite and Providence Mountains might be cut off.

### **Estimate of Inventory Completeness**

Based on our surveys at MOJA in 2004-2005, and evaluation of potential occurrence of undocumented species, we estimate an overall inventory completeness of 95% (Table 4). Excluding the two introduced species (Bullfrog and Western Pond Turtle) which formerly resided in the pond at Zzyzx, we estimate that only one amphibian (California Treefrog) and one reptile (Western Rattlesnake) remain undocumented from MOJA, resulting in an estimated inventory completeness of 67% for amphibians and 97% for reptiles. However, reports of both of these species are problematic, and it is possible that neither one inhabits MOJA, in which case inventory completeness would be 100% for both amphibians and reptiles.

### **Evaluation of Inventory Completeness through Species Accumulation**

A species accumulation curve (plotted per survey day) for 2004-2005 data is shown in Figure 1. This curve is strongly asymptotic, as 27 of the 31 species we recorded were found in the first four days of the inventory. This curve would have risen even more sharply had we visited Kelso Dunes in the first few survey days, as we easily would have detected Mojave Fringe-toed Lizard there. This strongly asymptotic curve suggests that we are close to detecting all the species present at MOJA. However, from literature and museum specimen records we know that an additional seven species are present (Table 4). Because the remaining species we did not detect are either rare (e.g., Gila Monster) or secretive (e.g., Ground Snake, Ring-necked Snake), finding them would likely require much greater field effort and/or different field methods (e.g., pitfall or funnel traps for snakes). Species accumulation curves can be valid estimators of inventory completeness in situations involving large numbers of species, extensive survey periods, and a wide variety of field methods (e.g., Scott 1994). However, given our knowledge of the habitats and local distribution of potential species, as well as museum specimen records, we believe the master list approach provides a more precise estimate of inventory completeness at MOJA.

### Rare, Exotic, or Sensitive Species

The Desert Tortoise is the only species we recorded at MOJA that is listed (as Threatened) under the federal Endangered Species Act. We did not attempt to review the extensive literature on this species, which is known to occur throughout MOJA (e.g., Germano et al. 1994; Appendix C). A long-term Desert Tortoise monitoring plot has been established in Ivanpah Valley for decades (e.g., Berry and Medica 1995). We found 15 Desert Tortoises in 2004-2005, including four old, weathered shell remains. We found tortoises in lower Bull Canyon (Granite Mountains), near Budweiser Spring (Granite Mountains), along the powerline road north of the Granite Mountains, on the Kelso Dunes road, on Kelbaker Road near Kelso Dunes Road, below Cornfield Spring, in the Kelso Mountains and on the eastern bajada of the Ivanpah Mountains. Although outside the Preserve, we also frequently saw tortoises along the dirt roads between US 95 and the eastern MOJA boundary near Piute Creek.

Mojave Fringe-toed Lizard and Gila Monster, both documented from MOJA, are listed as Species of Special Concern by the state of California (Jennings and Hayes 1994). We found Mojave Fringe-toed Lizards commonly at Kelso Dunes, and despite targeted searches did not find any Gila Monsters during our surveys. Details on the distribution of these species in the Preserve are found in the species accounts (Appendix A).

The Pacific Treefrog, which is native west of MOJA in the Mojave River system, only occurs at MOJA in and around the large pond at the Desert Studies Center at Zzyzx, and was probably introduced sometime after the pond was constructed (Bill Presch, personal communication). Bullfrogs, which are native to eastern North America, formerly occurred in this pond (Bill Presch, personal communication), but are no longer found there or elsewhere in the Preserve. In 1992, BLM personnel relocated a few Western Pond Turtles from Camp Cady west of MOJA (where they are native) to the pond at Zzyzx, but the lack of recent sightings suggests they did not survive (Jeff Lovich, personal communication).

### Herpetofauna of Priority Sampling Areas

Much of our survey effort was concentrated in the predetermined priority sampling areas (Clark Mountain Range, Piute Range, Piute Creek, and Cornfield Spring). The Piute Range, with the exception of Piute Spring and Piute Creek, is relatively dry, with little chance of harboring new species, and we spent the least effort there among the four priority areas. Previous surveys in the priority sampling areas included Mitchell (1978) for the Clark Mountain area, Hazard and Rotenberry (1996) and Ulmer (1983) for Piute Creek, and Hazard and Rotenberry (1996) for Cornfield Spring. Based on these reports and museum specimen review (Appendix C), we found no new species in the Clark Mountains, and we only recorded Western Shovel-nosed Snake from the Lanfair Valley on the western edge of the Piute Range. However, we did record three new species at Piute Creek (Long-nosed Snake [shed skin only], Gopher Snake, and Speckled Rattlesnake), and at Cornfield Spring we found Desert Tortoise (shell remains only), Gilbert's Skink (shed skin only), Rosy Boa, and Coachwhip (shed skin only), in addition to previously recorded species. The Clark Mountain Range is a large area with a wide range of elevations and habitats, and most of the species occurring at MOJA probably occur somewhere in the Clark Mountain unit. The most noteworthy features of the Clark Mountain area are the presence of the highest elevation habitats in the Preserve (where Western Fence Lizards are common), Pachalka Spring (where Gilbert's Skinks and Ring-necked Snakes have been found, and Gila Monsters

may occur), and the eastern slopes in the vicinity of Ivanpah Spring, where the first recorded Gila Monster at MOJA (Bradley and Deacon 1966) was likely collected. Johnson et al. (1948) reported seeing an old Desert Tortoise carapace on the north side of Clark Mountain, but we know of no other records (Mitchell 1978, Appendix C), and do not know the status of the species there. Piute Creek and Cornfield Spring are both perennial streams, and Red-spotted Toads are abundant at both sites. Gila Monsters have been recorded from Piute Creek, and probably occur at Cornfield Spring as well. Ring-necked Snake, which is rare in the Preserve (and in the Mojave Desert generally), has been found at Piute Creek (Hazard and Rotenberry 1996), and it may also occur at Cornfield Spring. Other uncommon species (e.g., Western Ground Snake, Southwestern Black-headed Snake, Western Lyre Snake) may also occur at one or both of these sites. Additional surveys would likely record many more species in these areas, particularly at Cornfield Spring, which has not been surveyed as much as Piute Creek over the years. A complete list of species documented from each priority sampling area is found in Appendix D.

### **Specimens Collected**

We collected nine reptile specimens at MOJA during our surveys, mostly snakes and lizards found dead on roads. The one live animal we collected was a Long-tailed Brush Lizard at Piute Creek. A complete list of these specimens and associated collection and cataloging data is found in Table 5. All of these specimens are deposited in the herpetology collection at the Natural History Museum of Los Angeles County. Specimens were collected under research permit numbers MOJA-2003-SCI-0071 and MOJA-2005-SCI-0013, and cataloged under accession number MOJA-32.

### **Update of NPSpecies and NatureBib Databases**

Prior to this project, the NPSpecies database for amphibians and reptiles at MOJA contained numerous omissions, synonymies, and outdated or inaccurate subspecies names. NPSpecies checklist field assignments for all species are given in Table 4, and we are working with MOJN staff on populating NPSpecies with this information, as well as uploading bibliographic and museum specimen data into NatureBib and NPSpecies, respectively.

## **CONSIDERATIONS FOR FUTURE INVENTORY WORK AND LONG-TERM MONITORING**

### **Future Inventory Work**

We estimate that we have documented >90% of the reptile species present at MOJA, and of reptiles and amphibians combined. Our estimate of 67% inventory completeness for amphibians may be conservative, as the one undocumented species (California Treefrog) may not occur, and reports (all aural) could be based on misidentifications. Future inventory effort for amphibians should be directed towards determining the status of California Treefrog by intensive, repeated surveys in the Cove Spring area of the Granite Mountains. The only reptile we have included as hypothetical is the Western Rattlesnake. If this species does occur within MOJA, it would most likely be in the upper elevation woodlands of the higher mountains (e.g., Clark, New York, Providence Mountains).

Although most (if not all) potentially occurring species of amphibians and reptiles have been documented from MOJA, many species are known from only a handful of observations, and next to nothing is known about their status or distribution within the Preserve. Much more field effort will be needed to determine the current status of Gila Monsters, which haven't been positively recorded from MOJA since 1982 (Lovich and Beaman in press). Other species with very little information from within the Preserve include Ring-necked Snake, Western Ground Snake, Southwestern Black-headed Snake, and Western Lyre Snake.

New species or range extensions within the Preserve may be documented opportunistically. Observations and/or collections by NPS staff can be invaluable in these efforts, especially for uncommon or secretive species that are generally undetected during periodic, short duration visits by researchers. Solid baseline data exist on occurrence of amphibian and reptile species at MOJA, and help of interested staff and volunteers can be directed towards documenting suspected or rare species. Road-killed animals should be salvaged and placed in the freezer until they can be properly preserved. These specimens should be double or triple bagged in plastic ziploc or similar bags, with an effort made to squeeze excess air out of the bags, and complete collection data (date, collector, and precise location, preferably with UTM coordinates) included in the bags with the specimens.

### **Long-term Monitoring**

Monitoring of rare amphibian and reptile species, which are often of interest as potential "vital signs" of ecosystem health, would be extremely difficult in most cases, simply because they are so hard to locate. The extreme difficulty in capturing large enough sample sizes of such species for statistical analysis would probably preclude their use as monitoring targets. Instead, herpetofauna monitoring at MOJA should focus on the entire community where possible, and targeted monitoring should focus on the most common species or species groups. These target species should be common, easily observed and counted, and respond predictably and measurably to fluctuations of climatic variables.

Although only one native amphibian (Red-spotted Toad) has been documented from MOJA, monitoring of amphibians may provide valuable information for the Preserve. It is widely acknowledged that amphibian populations have declined throughout the world (e.g., Houlahan et al. 2003), although their suitability as biological "indicator" species has recently been challenged (Beebee and Griffiths 2005). Factors implicated in declines include habitat destruction, global climate change, chemical contamination, disease, invasive species, and commercial exploitation (Semlitsch 2003). Because natural fluctuations in amphibian populations are often so great from year to year (e.g., Pechmann et al. 1991), long-term studies are often necessary to estimate population status. As well, only long-term monitoring efforts may separate these natural fluctuations from human-caused impacts (Pechmann et al. 1991). In addition, monitoring within natural areas can serve as an important baseline against which to judge population changes in more managed habitats (Adams and Bury 2002), and National Parks are an ideal location for such long-term monitoring (Hall and Langtimm 2001). Red-spotted Toads are widespread at MOJA, and monitoring could include nocturnal call surveys or visual walking surveys of known breeding areas, which are primarily permanent and semi-permanent streams in the various mountains within the Preserve. Large-scale site occupancy rate monitoring of spring and stream areas throughout the park could be analyzed using Percent Area Occupied analysis (e.g.

MacKenzie et al. 2002). These surveys could be conducted during periods when tadpoles would likely be present, allowing site occupancy to be verified even when no adult animals are observed (e.g., midday during warm, dry weather). The recent discovery by Liz Gallegos and Rob Fisher (USGS San Diego Field Station) of malformed Red-spotted Toads at Piute Creek (Liz Gallegos, personal communication) is cause for concern, and they are continuing to research the situation. These malformations could be caused by changes in water temperature or chemistry following the fire along Piute Creek in 2004, residual contaminants from old mining operations, herbicides used in tamarisk removal, or other factors (Liz Gallegos, personal communication). Given this discovery, monitoring of Red-spotted Toads at Piute Creek should be a priority.

For reptiles, we propose that monitoring should generally encompass communities of species (e.g., diurnal lizards), and focus especially on the most common species (e.g., Side-blotched Lizard, Western Whiptail, Zebra-tailed Lizard). An exception might be Mojave Fringe-toed Lizard, which could be monitored separately at Kelso Dunes. Due to its status under the federal Endangered Species Act, the Desert Tortoise may continue to be the focus of targeted monitoring within the Preserve. Lizards, which are relatively sedentary, usually show relatively rapid and substantial population responses to fluctuations in precipitation and concomitant variation in primary productivity at a site. For this reason, common diurnal desert lizards have been the centerpieces of herpetofauna monitoring at Organ Pipe Cactus National Monument for over a decade (Rosen 2000, Rosen and Lowe 1996). Careful placement of permanent monitoring sites at MOJA could also include other locally common species such as Great Basin Collared Lizard, Common Chuckwalla, and Desert Spiny Lizard. Potential monitoring methods for lizards include time-area constrained searches (Crump and Scott 1994), lizard line transect surveys (Rosen and Lowe 1995, 1996), or pitfall trapping (Campbell and Christman 1982). Because lizard lines (Rosen and Lowe 1995, 1996) use the peak value observed on one of many transect walks conducted at a site during each survey, they help correct for differences in lizard activity throughout the survey period (usually an entire morning). In addition, because they are linear and only one transect walk is used in analysis (per species), they avoid double counting, which is a potential problem in using time-area constrained searches as a monitoring method.

Swann (1999), using transect methods of Rosen and Lowe (1995, 1996), used power analysis to evaluate the amount of effort required to detect changes in populations of common lizard species at Tonto National Monument, Arizona. He concluded that the effort needed to detect trends in even the most abundant species would be prohibitive for a small park like Tonto. For example, he determined that detecting a 2% annual decline over ten years in the two most common lizard species would require 120 person-days of fieldwork annually. However, common desert lizards have been successfully monitored for over a decade at Organ Pipe Cactus National Monument, Arizona (ORPI) using line transect methods with only about 40 person-days of fieldwork annually (Rosen 2000). Before implementation of a monitoring program at MOJA, a pilot study should be conducted in order to estimate the number of sites and surveys that would be needed to generate sample sizes adequate for statistical analysis of trends.

If snakes are included in herpetofauna monitoring at MOJA, this group should be monitored with night driving surveys. Unlike with diurnal lizards, where sufficient sample sizes of a few common species can be obtained, monitoring of snakes should probably focus on trends in

ecological subsets of the snake community, such as lizard-eating snakes, rodent-eating snakes, or egg-laying versus viviparous species (e.g., Price and LaPointe 1990). Trends in these ecological groups may reflect changes in environmental conditions, which are in turn affecting predator or prey availability, or moisture regimes affecting snake reproduction (e.g., desiccation of egg clutches). Another compelling reason to use road driving as a monitoring method for snakes is the possibility that road mortality may be having an impact on snake populations within the Preserve. All of the paved roads within MOJA would be suitable for such surveys, although Kelbaker Road and Kelso-Cima Road provide the longest one-way transects and pass through the greatest variety of habitats, and also have the highest snake mortality rates.

A special area for multi-taxa long-term monitoring considerations is Piute Creek. The area of the creek with the densest mature trees burned in 2004, apparently from a human-caused fire. The habitat composition and structure along the creek has been dramatically changed as a result of the fire (personal observation). In addition to researching the malformed Red-spotted Toads (above), it will be important to monitor this area and compare species recovery to baseline information from before the fire.

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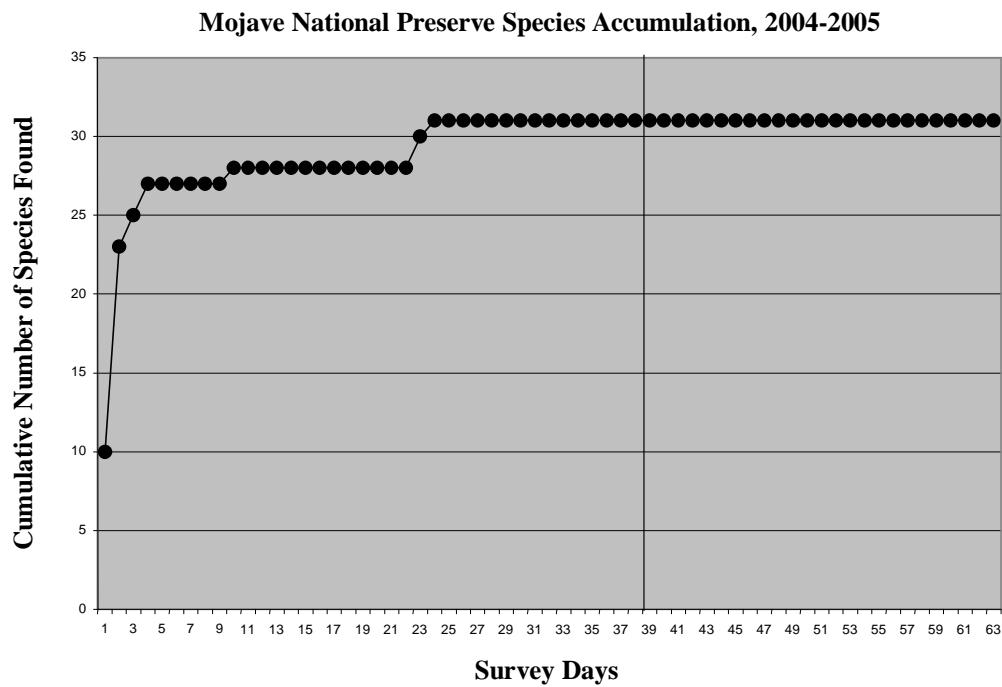
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**Figure 1.** Species accumulation curve for amphibians and reptiles at Mojave National Preserve, 2004-2005. Vertical line through the data separates yearly survey days.

## Mojave National Preserve Amphibians and Reptiles

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**Table 1.** Scientific names of amphibians and reptiles used in the text. Scientific and common names follow Stebbins (2003). Recent studies have proposed changes in the taxonomy of some species found at MOJA, and interested readers should consult Crother (2000) and Crother et al. (2003) for a summary of these proposals.

### **Amphibians**

Red-spotted Toad (*Bufo punctatus*)  
California Treefrog (*Hyla cadaverina*)  
Pacific Treefrog (*Hyla regilla*)  
Bullfrog (*Rana catesbeiana*)

### **Turtles**

Western Pond Turtle (*Clemmys marmorata*)  
Desert Tortoise (*Gopherus agassizii*)

### **Lizards**

Western Banded Gecko (*Coleonyx variegatus*)  
Desert Iguana (*Dipsosaurus dorsalis*)  
Common Chuckwalla (*Sauromalus obesus*)  
Great Basin Collared Lizard (*Crotaphytus bicinctores*)  
Long-nosed Leopard Lizard (*Gambelia wislizenii*)  
Zebra-tailed Lizard (*Callisaurus draconoides*)  
Mojave Fringe-toed Lizard (*Uma scoparia*)  
Desert Spiny Lizard (*Sceloporus magister*)  
Western Fence Lizard (*Sceloporus occidentalis*)  
Side-blotched Lizard (*Uta stansburiana*)  
Long-tailed Brush Lizard (*Urosaurus graciosus*)  
Desert Horned Lizard (*Phrynosoma platyrhinos*)  
Desert Night Lizard (*Xantusia vigilis*)  
Gilbert's Skink (*Eumeces gilberti*)  
Western Whiptail (*Cnemidophorus tigris*)  
Gila monster (*Heloderma suspectum*)

### **Snakes**

Western Blind Snake (*Leptotyphlops humilis*)  
Rosy Boa (*Charina trivirgata*)  
Glossy Snake (*Arizona elegans*)  
Western Shovel-nosed Snake (*Chionactis occipitalis*)  
Ring-necked Snake (*Diadophis punctatus*)  
Night Snake (*Hypsiglena torquata*)  
Common Kingsnake (*Lampropeltis getula*)  
Coachwhip (*Masticophis flagellum*)  
Striped Whipsnake (*Masticophis taeniatus*)  
Spotted Leaf-nosed Snake (*Phyllorhynchus decurtatus*)  
Gopher Snake (*Pituophis catenifer*)  
Long-nosed Snake (*Rhinocheilus lecontei*)  
Western Patch-nosed Snake (*Salvadora hexalepis*)  
Western Ground Snake (*Sonora semiannulata*)  
Southwestern Black-headed Snake (*Tantilla hobartsmithi*)  
Western Lyre Snake (*Trimorphodon biscutatus*)  
Sidewinder (*Crotalus cerastes*)  
Speckled Rattlesnake (*Crotalus mitchellii*)  
Mojave Rattlesnake (*Crotalus scutulatus*)  
Western Rattlesnake (*Crotalus viridis*)  
Arizona Black Rattlesnake (*Crotalus viridis cerberus*)  
Southern Pacific Rattlesnake (*Crotalus viridis helleri*)

**Table 2.** Amphibian and reptile species observed during herpetofauna surveys at Mojave National Preserve in 2004-2005, and the numbers of each species observed (not counting amphibian tadpoles) by each method. Abbreviations for survey types are: GS = general surveys, NGS = nocturnal general surveys, ND = night driving surveys and RE = random encounters.

Species	GS	NGS	ND	RE	Totals
Red-spotted Toad	242	53			<b>308</b>
Desert Tortoise	8			7	<b>15</b>
Western Banded Gecko	1		14	2	<b>17</b>
Desert Iguana	6		1	8	<b>15</b>
Common Chuckwalla	11				<b>11</b>
Great Basin Collared Lizard	13			9	<b>22</b>
Long-nosed Leopard Lizard	18		4	17	<b>39</b>
Zebra-tailed Lizard	71			24	<b>95</b>
Mojave Fringe-toed Lizard	42			1	<b>43</b>
Desert Spiny Lizard	73		2	15	<b>90</b>
Western Fence Lizard	36				<b>36</b>
Side-blotched Lizard	650			35	<b>685</b>
Long-tailed Brush Lizard	13			1	<b>14</b>
Desert Horned Lizard	1		11	21	<b>33</b>
Desert Night Lizard	19			3	<b>22</b>
Gilbert's Skink	1				<b>1</b>
Western Whiptail	247		1	26	<b>274</b>
Rosy Boa	2				<b>2</b>
Glossy Snake			29	1	<b>30</b>
Western Shovel-nosed Snake			2	1	<b>3</b>
Night Snake			3		<b>3</b>
Common Kingsnake				1	<b>1</b>
Coachwhip	4		8	13	<b>25</b>
Striped Whipsnake	1				<b>1</b>
Spotted Leaf-nosed Snake			8		<b>8</b>
Gopher Snake	2		5	10	<b>17</b>
Long-nosed Snake	1		17	1	<b>19</b>
Western Patch-nosed Snake	3		1	10	<b>14</b>
Sidewinder	1		31	5	<b>37</b>
Speckled Rattlesnake	9			7	<b>16</b>
Mojave Rattlesnake	1		10	6	<b>17</b>
<b>TOTALS</b>	<b>1,476</b>	<b>53</b>	<b>147</b>	<b>237</b>	<b>1,913</b>

**Table 3.** Field effort allocated to each survey method during an inventory of amphibians and reptiles at Mojave National Preserve in 2004-2005.

	<b>General Surveys</b>	<b>Nocturnal General Surveys</b>	<b>Night Drives</b>	<b>Random Encounters</b>	<b>TOTALS</b>
<b>Number of Surveys</b>	92	8	40	123	<b>263</b>
<b>Person-hours</b>	192.2	4.3	115.7	N/A	<b>312.1</b>
<b>Kilometers Driven</b>	N/A	N/A	3,847	N/A	<b>3,847</b>

## Mojave National Preserve Amphibians and Reptiles

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**Table 4.** Amphibian and reptile species found or expected to occur at Mojave National Preserve. Ranking of probability of species occurrences is as follows: 1 = low probability, 2 = medium probability and 3 = high probability. SX = specimen collected, this study. SP = specimen collected, previous study. For all species, NPSpecies checklist fields for residency and nativity are “breeder” and “native,” respectively, except for the Pacific Treefrog, Bullfrog, and Western Pond Turtle, whose nativity is “non-native.”

Species	Rank	NPSpecies Park Status	NPSpecies Abundance
Red-spotted Toad	SP	Present in Park	Abundant
California Treefrog	1	Unconfirmed	N/A
Pacific Treefrog	SP	Present in Park	Uncommon
Bullfrog	N/A	Historic	N/A
Western Pond Turtle	N/A	Historic	N/A
Desert Tortoise	SP	Present in Park	Common
Western Banded Gecko	SP	Present in Park	Common
Desert Iguana	SP	Present in Park	Common
Common Chuckwalla	SP	Present in Park	Common
Great Basin Collared Lizard	SP	Present in Park	Common
Long-nosed Leopard Lizard	SX, SP	Present in Park	Common
Zebra-tailed Lizard	SP	Present in Park	Abundant
Mojave Fringe-toed Lizard	SP	Present in Park	Abundant
Desert Spiny Lizard	SP	Present in Park	Abundant
Western Fence Lizard	SP	Present in Park	Common
Side-blotched Lizard	SP	Present in Park	Abundant
Long-tailed Brush Lizard	SX, SP	Present in Park	Common
Desert Horned Lizard	SX, SP	Present in Park	Common
Desert Night Lizard	SP	Present in Park	Abundant
Gilbert's Skink	SP	Present in Park	Uncommon
Western Whiptail	SP	Present in Park	Abundant
Gila Monster	SP	Present in Park	Rare
Western Blind Snake	SP	Present in Park	Rare
Rosy Boa	SP	Present in Park	Rare
Glossy Snake	SX, SP	Present in Park	Common
Western Shovel-nosed Snake	SP	Present in Park	Uncommon
Ring-necked Snake	SP	Present in Park	Rare
Night Snake	SP	Present in Park	Uncommon
Common Kingsnake	SP	Present in Park	Rare
Coachwhip	SP	Present in Park	Common
Striped Whipsnake	SP	Present in Park	Uncommon
Spotted Leaf-nosed Snake	SX, SP	Present in Park	Common
Gopher Snake	SP	Present in Park	Common
Long-nosed Snake	SX, SP	Present in Park	Common
Western Patch-nosed Snake	SP	Present in Park	Common
Western Ground Snake	SP	Present in Park	Rare
Southwestern Black-headed Snake	SP	Present in Park	Rare
Western Lyre Snake	SP	Present in Park	Rare
Sidewinder	SP	Present in Park	Abundant
Speckled Rattlesnake	SP	Present in Park	Common
Mojave Rattlesnake	SP	Present in Park	Common
Western Rattlesnake	1	Unconfirmed	N/A
<b>TOTAL UNDOCUMENTED</b>	<b>2</b>		
<b>TOTAL DOCUMENTED</b>	<b>38</b>		
<b>ESTIMATED INVENTORY COMPLETENESS</b>	<b>95%</b>		

**Table 5.** Specimens collected during an inventory of amphibians and reptiles at Mojave National Preserve in 2004-2005. Collector initials are BTH = Bryan T. Hamilton and TBP = Trevor B. Persons. Specimens are housed in the herpetology collection at the Natural History Museum of Los Angeles County (LACM), and were collected under accession number MOJA-32. UTM coordinates are zone 11, and in the North American Datum of 1927 (NAD27), with estimated position errors given in parentheses.

Collector Field #	NPS Catalog Number	LACM Catalog Number	Species	Date	Location and Notes
BTH 0023	MOJA 21	LACM 161145	Long-nosed Leopard Lizard	5/22/04	Black Canyon Road, 7.0 miles S of Hole-In-The-Wall visitor center. Adult male, DOR. UTM 648827 E, 3856022 N.
TBP 319	MOJA 17	LACM 161146	Long-tailed Brush Lizard	5/8/04	Fort Piute, basalt ledge in riparian area. Adult male. UTM 683795 E, 3887409 N (9m).
BTH 0021	MOJA 20	LACM 161147	Desert Horned Lizard	5/20/04	Excelsior Mine Road, 3400 feet elevation. Adult male, DOR. UTM 617722 E, 3931037 N.
TBP 316	MOJA 14	LACM 161148	Glossy Snake	5/6/04	Kelso-Cima Road, 4.3 miles SW Cima jct. Adult, DOR ~30 m NE TBP 317. UTM 636164 E, 3893914 N (8m).
TBP 318	MOJA 16	LACM 161149	Glossy Snake	5/6/04	Morning Star Mine Road, 0.9 miles N of Cima (jct.). Adult, DOR.
TBP 315	MOJA 13	LACM 161150	Spotted Leaf-nosed Snake	5/4/04	Kelbaker Road, 2.0 miles S Kelso Dunes Road. Adult, DOR.
TBP 320	MOJA 18	LACM 161151	Spotted Leaf-nosed Snake	6/11/04	Kelbaker Road, 0.3 miles S Kelso Depot (jct.). Adult male, DOR. UTM 623251 E, 3874973 N (5m).
TBP 321	MOJA 19	LACM 161152	Spotted Leaf-nosed Snake	6/11/04	Kelbaker Road, 1.5 miles N of Interstate 40. Adult male, DOR. UTM 622315 E, 3844365 N (4m).
TBP 317	MOJA 15	LACM 161153	Long-nosed Snake	5/6/04	Kelso-Cima Road, 4.3 miles SW Cima jct. Adult, injured ~30 m SW TBP 316. UTM 636164 E, 3893914 N (8m).

**Appendix A.** Annotated list of amphibians and reptiles at Mojave National Preserve, including all documented and hypothetical species. Because we do not have data on population sizes or density of species at MOJA, the use of the terms abundant, common, uncommon, and rare (the available abundance categories in NPSpecies) are necessarily somewhat subjective. They are designed to describe the relative abundance of a particular species, compared with other, similar species at MOJA, and also with the same species elsewhere throughout its range. Status of all documented and hypothetical species at MOJA, as well as NPSpecies checklist field assignments, are presented in Table 4. All documented species are represented by at least one voucher specimen in an institutional collection (Appendix C).

### Species Documented from Mojave National Preserve

**Red-spotted Toad (*Bufo punctatus*).** This species, the only naturally occurring amphibian in the Preserve, has been collected in the Clark, Providence, and Granite Mountains, and at Piute Creek (Johnson et al. 1948, Appendix C). We recorded 308 transformed Red-spotted Toads during our surveys (plus many more tadpoles) at numerous springs and streams at MOJA, including Budweiser Wash, Bull Canyon, and Cove Spring in the Granite Mountains, Cornfield Spring in the Providence Mountains, and along Piute Creek. We also photographed an adult Red-spotted Toad in Caruthers Canyon in the New York Mountains, which is noteworthy because we did not locate any specimen or literature records for the species in the New York Mountains. Red-spotted Toads were also photographed in Garvonzo Canyon (east of Brant siding) on the west side of the New York Mountains in 2005 (Debra Hughson, personal communication). During the relatively wet spring of 2005 we found this species along Bull Canyon as far downstream as the powerline access road at the base of the bajada, whereas in 2004 this was a large dry wash in that area. Red-spotted Toads are locally abundant at MOJA.

**Pacific Treefrog (*Hyla regilla*).** The Pacific Treefrog, which is native in other parts of the Mojave Desert, only occurs in the Soda Spring area at MOJA, and was probably introduced following the construction of the ponds near what is now the Desert Studies Center at Zzyzx. They were collected as early as 1937 (Appendix C). Treefrogs formerly occupied some of the seeps along the entrance road, but apparently now only occur near the ponds (Rob Fulton and Bill Presch, personal communication). We did not record any Pacific Treefrogs during this inventory, nor did we survey specifically for them.

**Bullfrog (*Rana catesbeiana*).** This species, which is native to the eastern United States, has been widely introduced in the west, often to the detriment of native amphibians and reptiles (e.g., Rosen and Schwalbe 2002). At MOJA, Bullfrogs formerly occupied the ponds at Soda Springs, but have apparently been extirpated (Rob Fulton and Bill Presch, personal communication). All other natural aquatic habitats at MOJA are probably too ephemeral to support Bullfrogs, which prefer permanent ponds or sluggish streams (Stebbins 2003).

**Western Pond Turtle (*Clemmys marmorata*).** This highly aquatic turtle occurs as a disjunct, relictual population along the Mojave River west of MOJA, including at Camp Cady and Afton Canyon (Lovich and Meyer 2002). In 1992 Bureau of Land Management personnel relocated a

few Western Pond Turtles from Camp Cady to Lake Tuende at Zzyzx, but apparently they did not survive (Jeff Lovich, personal communication). Although this species has probably not occurred naturally at MOJA in historic times, it likely did occur there during the Pleistocene (Jeff Lovich, personal communication).

**Desert Tortoise (*Gopherus agassizii*).** We recorded 15 Desert Tortoises, four of which were old shell remains. We found tortoises in lower Bull Canyon (Granite Mountains), near Budweiser Spring (Granite Mountains), along the powerline road north of the Granite Mountains, on the Kelso Dunes road, on Kelbaker Road near Kelso Dunes Road, below Cornfield Spring, in the Kelso Mountains and on the eastern bajada of the Ivanpah Mountains. Although outside the Preserve, we also frequently saw tortoises along the dirt roads between US 95 and the eastern MOJA boundary near Piute Creek. The Mojave Desert population (including MOJA) of Desert Tortoise is listed as Threatened under the federal Endangered Species Act. Desert Tortoises are common at MOJA, and are most frequently seen during spring.

**Western Banded Gecko (*Coleonyx variegatus*).** We found this nocturnal lizard primarily in creosote bush desert habitats, and all but one individual (found under a rock near Pachalka Spring in the Clark Mountains) was observed while night driving. Ulmer (1983) reported a single capture at Piute Creek. Wallace (2003) captured them on a rocky creosote-dominated bajada near Soda Lake, and reported a severe decline between 1991-1993 and 2000-2001. Western Banded Geckos are probably common throughout most low and mid elevation habitats at MOJA, especially in rocky areas (e.g., Stein and Warrick 1979).

**Desert Iguana (*Dipsosaurus dorsalis*).** We recorded 15 Desert Iguanas at MOJA, all from creosote bush desert areas, a habitat association also noted by Johnson et al. (1948). The important habitat components in these areas are likely the combination of open areas and sandy hummocks with shade and rodent burrows (Stebbins 2003). Desert Iguanas were most reliably found along the fringes of the Kelso Dunes (including along the access road), but are probably locally common in many areas of the Preserve. Wallace (2003) trapped them most commonly in rocky creosote habitat on the upper bajada portion of his study site.

**Common Chuckwalla (*Sauromalus obesus*).** We recorded only 11 Common Chuckwalls in 2004-2005, including in Bull Canyon and Budweiser Wash in the Granite Mountains, Jackass Canyon near Old Dad Mountain, and at Rock Spring in Cedar Canyon. The Rock Spring location, on a bouldery slope south of the creek, was approximately 1520 m (4947 ft) elevation, in an area of blackbrush and pinyon-juniper woodland. Johnson et al. (1948), who collected extensively in the Rock Spring area, did not record Chuckwalla there, and the highest elevation they recorded one anywhere in the region was 1372 m (4,500 ft). Mitchell (1978) reported four individuals from a rocky slope habitat in the Clark Mountains. Hazard and Rotenberry reported a possible sighting near Piute Spring, and one of us (EMN) also briefly observed a possible Chuckwalla in that area, which contains suitable-looking rocky habitat. Common Chuckwalls are locally common at MOJA.

**Great Basin Collared Lizard (*Crotaphytus bicinctores*).** We observed 22 Great Basin Collared Lizards at MOJA during our surveys, all in rocky habitats. This conspicuous species is common

in rocky areas throughout the Preserve, from low elevation creosote desert habitats up into the pinyon-juniper zone.

**Long-nosed Leopard Lizard (*Gambelia wislizenii*).** This relative of the collared lizards is common throughout MOJA, and is usually found in more open and less rocky terrain. We recorded 39 Long-nosed Leopard Lizards, from the creosote bush desert (including at Kelso Dunes) up into the pinyon-juniper zone.

**Zebra-tailed Lizard (*Callisaurus draconoides*).** This was the third most common lizard species observed during our surveys. Zebra-tailed Lizards are abundant in desert habitats at MOJA, and are especially common near dunes, in open creosote bush desert, and along sandy washes and dirt roads. Wallace (2003) reported severe declines of Zebra-tailed Lizards between 1991-1993 and 2000-2001 near Soda Dry Lake.

**Mojave Fringe-toed Lizard (*Uma scoparia*).** This species, like other fringe-toed lizards, lives only on dunes and other areas of fine, windblown sand (Stebbins 2003). At MOJA, Mojave Fringe-toed Lizards are only found on Kelso Dunes and the associated dune habitats of Devil's Playground directly to the northwest, where they are locally abundant. During one survey on the southern edge of Kelso Dunes we recorded 36 Fringe-toed Lizards in two and a half hours. Wallace (2003) reported a single pitfall trap capture from the west side of Soda Dry Lake. The Mojave Fringe-toed Lizard is listed as a Species of Special Concern by the state of California (Jennings and Hayes 1994).

**Desert Spiny Lizard (*Sceloporus magister*).** Desert Spiny Lizards are abundant at MOJA, especially in rocky habitats, although they will climb on almost anything (Joshua trees, fence posts, etc.). They occur from the lowest deserts up into the pinyon-juniper zone, but are replaced by the Western Fence Lizard at the highest elevations.

**Western Fence Lizard (*Sceloporus occidentalis*).** This species is found only in the higher elevations of MOJA, where it replaces the similar Desert Spiny Lizard. Both Bell and Price (1996) and Stebbins (2003) list “desert outposts,” including the Providence and New York Mountains and Midhills region at MOJA. However, Western Fence Lizards also occur in upper elevations on Clark Mountain (Johnson et al. 1948, and present survey) and in the Granite Mountains (Driscoll 1987). We found them most abundantly in Caruthers Canyon in the New York Mountains, and they are probably common in many such areas of the Preserve. We did not observe Western Fence Lizards at either Piute Creek or Cornfield Spring, although the rocky slopes and wash directly above Cornfield Spring itself, at the lower edge of pinyon-juniper, look promising.

**Side-blotched Lizard (*Uta stansburiana*).** This was the most frequently observed species during our surveys, and was found from the lowest valleys up into the pinyon-juniper habitats in the mountains. Wallace (2003) also reported this to be the most frequently captured species near Soda Dry Lake. Side-blotched Lizards are abundant throughout the Preserve.

**Long-tailed Brush Lizard (*Urosaurus graciosus*).** Long-tailed Brush Lizards are usually found on trees and large shrubs in desert habitats (Stebbins 2003). We found this species on creosote

bushes in lower Bull Canyon (near Kelso Dunes), on desert willows (*Chilopsis linearis*) in upper Bull Canyon, and on both desert willows and large mesquites (*Prosopis*) in Piute Creek. We also observed one well-camouflaged pale-colored individual on a large clump of galleta grass (*Hilaria rigida*) on Kelso Dunes. Johnson et al. (1948) only recorded them from the Kelso area, and the only specimen record (Appendix C) from other than the Kelso Dunes, Bull Canyon, or Piute Creek areas is one collected at “Kelbaker Rd, 10-15 mi ESE of Hwy 15 at Baker,” which would be in the general vicinity of the lava beds area. Mitchell (1978) reports observing one individual in the creosote-Joshua tree association in the Clark Mountain area, but gives no additional information. Wallace (2003) reported Long-tailed Brush Lizards from the sandy creosote-dominated lower bajada portion of his study site on the west side of Soda Dry Lake. Wallace (2003) also reported severe declines (over 95%) in capture success in 2000-2001 compared with 1991-1993, possibly related to decreased precipitation in 2000-2001. Long-tailed Brush Lizards are locally common where they are known to occur at MOJA, and may be more widespread in the Preserve, especially in washes with well-developed desert willow stands.

**Desert Horned Lizard (*Phrynosoma platyrhinos*).** Despite its cryptic appearance, we observed 33 Desert Horned Lizards during our surveys, although most of these were made while driving, as they frequently bask on road surfaces. The species primarily occurs in the creosote bush habitats in the valleys and lower slopes at MOJA (Johnson et al. 1948), although we did observe one individual in higher elevation sagebrush habitat along Black Canyon Road. Desert Horned Lizards are common throughout MOJA.

**Desert Night Lizard (*Xantusia vigilis*).** Although this species is usually associated with Joshua tree woodlands, where it takes refuge under dead limbs on the ground beneath trees (e.g., Johnson et al. 1948, Stebbins 2003, Zweifel and Lowe 1966), we also found them in areas devoid of Joshua trees, especially under boards and other trash associated with tumbledown buildings. In the Granite Mountains, Stein and Warrick (1979) found Desert Night Lizards commonly under dead Mojave yuccas (*Yucca schidigera*). Desert Night Lizards take refuge under tamarisk (*Tamarix* sp.) around the Desert Studies Center (Bill Presch, personal communication), although the species is probably much less common in such low desert habitats. Desert Night Lizards probably occur throughout MOJA, and they are probably abundant in most areas.

**Gilbert’s Skink (*Eumeces gilberti*).** This large skink is known from the Clark, Granite, Providence, and New York mountains at MOJA (Johnson et al. 1948, Appendix C), where it occurs in various rocky or brushy habitats, usually near streams, springs, or dry washes (Johnson et al. 1948). We did not observe any Gilbert’s Skinks during our surveys, but we did find a piece of shed skin (with diagnostic cycloid skink-like scales) under debris near the stream below Cornfield Spring, which would be a new locality for the species (Hazard and Rotenberry 1996, Appendix C). Although they are probably locally common in many areas at MOJA, most observations are the result of pitfall trapping surveys (e.g., Driscoll 1987, Stein and Warrick 1979), a fact that may explain why we did not record this species.

**Western Whiptail (*Cnemidophorus tigris*).** This was the second most frequently observed lizard species during our surveys. It was also the second most abundant species captured in pitfall traps near Soda Dry Lake (Wallace 2003). Western Whiptails are common throughout the Preserve in all habitats up to the lower edge of the pinyon-juniper zone.

**Gila Monster (*Heloderma suspectum*).** The Gila Monster is probably the rarest reptile species at MOJA, and perhaps in California as well. Lovich and Beaman (in press) reviewed all specimen records, published accounts, and unverified sighting reports known to them of Gila Monsters in California. The earliest report of the species from MOJA is Bradley and Deacon (1966), who collected a specimen in 1962 approximately 11 km (7 miles) southwest of the Nevada state line on the eastern slope of the Clark Mountains. Based on that description, it seems likely that the specimen was collected in the vicinity of Ivanpah Springs, which contains suitable-looking rocky xeroriparian habitat in an area of otherwise dry desert. This locality, which is also the site of abandoned mines and associated roads and structures, is just west of (i.e., within) the current boundaries of MOJA. DeLisle (1979) reported the first sighting of a Gila Monster in the Providence Mountains (in 1968), near the old Vulcan Mine, and DeLisle (1983) later reported on nine additional sightings in the Providence Mountains during the “banner year” of 1982. Finally, Bicket (1982) photographed a Gila Monster at Piute Creek near Fort Piute in 1982. Multiple sightings have also been reported from the Kingston Range, north of MOJA, including as recently as May of 2006 (Lovich and Beaman in press). While surveying in 2005, local BLM ranger David Hall told us of a recent (spring 2005) sighting by a visitor in “Sandy Valley,” along Kingston Road between the Clark and Kingston ranges. The visitor showed Hall a digital photograph of a Gila Monster, and after talking to Hall we have confidence in his ability to identify the species. We surveyed the known localities within MOJA, as well as other sites with apparently suitable habitat (e.g., Cornfield Spring, Bull Canyon), but found no Gila Monsters. Given their occurrence at Vulcan Mine, it seems especially likely they also inhabit the nearby Cornfield Spring area, which appears to contain ideal habitat, including permanent water, shelter sites (rocks, burrows in embankments), and likely abundant vertebrate nest prey, especially mourning doves (Beck 2005, Beck and Jennings 2003). Lovich and Beaman (in press) suggest that the western distributional limit and rarity of Gila Monsters in the MOJA region is due to the lack of a biphasic rainfall pattern further west, as summer precipitation is important in their foraging ecology (Beck 2005). The lack of reports from the Granite Mountains, which lies to the west of the larger Providence Mountains and presumably receives less summer rainfall at a given elevation, may be the result of a real absence of the species from that range. However, the habitat in Bull Canyon, which has a northern exposure, semi-permanent water, and probably abundant prey, appears to be ideal. The Gila Monster is listed as a Species of Special Concern by the state of California (Jennings and Hayes 1994).

**Western Blind Snake (*Leptotyphlops humilis*).** This small, secretive, burrowing species has been collected at Soda Springs (Appendix C) and Piute Creek (Ulmer 1983), and a specimen without data resides in the UC Granite Mountains Desert Research Center collection, possibly collected from the Granites (Appendix C). Stein and Warrick (1979) note four previous observations from the Granites: three in pitfall traps near Cottonwood Spring, and another near Budweiser Spring. Brown (1976, cited in Tate 1981) observed a road-killed Western Blind Snake on Kelbaker Road 5 km northwest of Kelso in 1975. Rob Fulton and Bill Presch (personal communication) report seeing the species commonly at the Desert Studies Center at Soda Springs on evenings after a heavy rain, and Wallace (2003) reported a single pitfall trap capture from near there. We did not observe Western Blind Snake during our surveys. Although rarely observed, this species may be more common and widespread at MOJA than the few records indicate.

**Rosy Boa (*Charina trivirgata*).** Rosy Boas have been collected in the Granite (Cove Spring) and Providence (Bonanza King Mine, Vulcan Mine Road, Mitchell's Caverns) Mountains at MOJA (Appendix C). Stein and Warrick (1979) also noted an observation from Cottonwood Basin in the Granites, and Tate (1981) reported a Rosy Boa from 1.3 km west of Kelso Peak in the Kelso Mountains. Tate (1981) indicated that he deposited the specimen at UC Santa Barbara (UCSB 12083), and although Kent Beaman's database contains UCSB records, it does not contain this or others from Tate's survey. We found two Rosy Boas during our surveys, both from the vicinity of the wash below Cornfield Spring in the Providence Mountains, apparently the first records from that location. Stebbins (2003) notes the apparent distributional gap between the Providence Mountains to the south and the Panamint Mountains (in Death Valley National Park) to the north, despite apparently suitable habitat in the New York, Clark, and Kingston mountains.

**Glossy Snake (*Arizona elegans*).** We observed 30 Glossy Snakes at MOJA, the most of any snake species except Sidewinders. All of our observations were from roads, and all but one was at night. Most of the many specimens from MOJA were collected on roads (Appendix C). Johnson et al. (1948), who apparently did not employ night driving in their extensive inventory, failed to detect the species. Glossy Snakes are common throughout MOJA in all habitats below the pinyon-juniper zone.

**Western Shovel-nosed Snake (*Chionactis occipitalis*).** This small, secretive species occurs in sandy desert habitats (Stebbins 2003). At MOJA, Western Shovel-nosed Snakes have been collected from many such areas in the western half of the Preserve, roughly from Soda Lake to Kelso Dunes (Appendix C). They also have been collected on the Cima Road north of Interstate 15, i.e., just west of the Clark Mountains (Mitchell 1978, Appendix C). Wallace (2003) reported 40 captures in pitfall traps just west of Soda Dry Lake in 1991-1993 and 2000-2001, by far the most of any snake species he captured. Wallace (2003) captured them most commonly in middle bajada habitat of compact sand with scattered small rocks, even though his study area contained a less rocky, sandier habitat. We observed only three individuals in our surveys: one on Kelbaker Road ca. 3 miles east of Baker, one on Kelbaker Road 2.3 miles south of Kelso, and one under trash in a wash in Lanfair Valley, which may be the only record of the species in the eastern part of the Preserve. Although uncommonly observed, Western Shovel-nosed Snakes are probably locally abundant in some areas of MOJA.

**Ring-necked Snake (*Diadophis punctatus*).** This species has a spotty, relictual distribution in the Southwest, where it occurs in mesic habitats in mountains and near springs and watercourses (Stebbins 2003). Old specimen records exist from the Mitchell Caverns area of the Providence Mountains (Appendix C), and Wood and Richmond (2003) recently reported a specimen from Pachalka Spring in the Clark Mountains. Hazard and Rotenberry (1996) observed a Ring-necked Snake near Piute Spring. It seems likely that other isolated populations exist in mesic locations within MOJA (e.g., Bull Canyon or Budweiser Wash in the Granites, Cornfield Spring in the Providence Mountains, Caruthers Canyon in the New York Mountains).

**Night Snake (*Hypsirhynchus torquata*).** This strictly nocturnal species has been collected throughout MOJA, including in the vicinity of the Granite, Providence, and Clark mountains, as well as in lower elevation areas such as Soda Springs, along Kelbaker Road east of Kelso Dunes,

and in Piute Creek (Appendix C). We only observed three Night Snakes in 2004-2005, all during night driving surveys (two on Kelbaker Road south of Kelso, one on Kelso-Cima Road). Night Snakes are probably common throughout the Preserve.

**Common Kingsnake (*Lampropeltis getula*).** We only observed only one Common Kingsnake over the course of our surveys, a juvenile found on the Cima Road 3.2 miles north of Cima, in Joshua tree woodland. Johnson et al. (1948) also recorded only a single individual, from Cedar Canyon. Common Kingsnakes appear to be somewhat rare at MOJA, but have been collected from throughout the Preserve, including in or near the Granite, Providence, and New York mountains, as well as along Interstate 15 south of Clark Mountain (Appendix C).

**Coachwhip (*Masticophis flagellum*).** This large, fast snake is common throughout MOJA below the pinyon-juniper zone. We recorded 25 Coachwhips in 2004-2005, many of which were seen crossing roads in the heat of midday. We verified their presence at two priority sampling areas (Piute Creek and Cornfield Spring) by identification of shed skins.

**Striped Whipsnake (*Masticophis taeniatus*).** This relative of the Coachwhip is found in the higher elevations of MOJA, and has been collected from the Granite, Providence, Midhills, New York, and Clark Mountains (Appendix C). We only observed a single Striped Whipsnake during our surveys, in Keystone Canyon in the New York Mountains. During the survey period, USGS colleagues conducting mammal surveys at MOJA observed two Striped Whipsnakes at high elevations (ca. 2,300 m) in the pinyon-juniper zone on Clark Mountain (David Tidhar, personal communication). This species is probably locally common in upper elevation pinyon-juniper habitats at MOJA.

**Spotted Leaf-nosed Snake (*Phyllorhynchus decurtatus*).** Once thought to be rare, the advent of night driving as a herpetofauna survey method showed this species to be abundant in many desert areas in the Southwest (e.g., Klauber 1939). We observed eight Spotted Leaf-nosed Snakes, all on the road at night (most of them dead), on Kelbaker Road and Kelso-Cima Road. Mitchell (1978) collected one on Cima Road west of Clark Mountain. The distribution of Spotted Leaf-nosed Snakes corresponds closely to that of creosote bush (Stebbins 2003), and it is probably common throughout such desert habitats at MOJA.

**Gopher Snake (*Pituophis catenifer*).** This widespread, generalist species is fairly common throughout MOJA from creosote bush desert up into the pinyon-juniper woodlands, although most of our 17 observations were from middle elevation areas. We recorded Gopher Snake from Piute Creek, apparently the first record from that site (Hazard and Rotenberry 1996, Ulmer 1983, Appendix C).

**Long-nosed Snake (*Rhinocheilus lecontei*).** We found 19 Long-nosed Snakes at MOJA in 2004-2005, 17 of which were found while night driving. We found one under trash in a dry wash in Lanfair Valley, and we found a shed skin under a bush at Fort Piute, possibly a new record for the Piute Creek area (Appendix C). Stebbins (2003) notes that the species is cold-tolerant and we often found them (along with Glossy Snakes and Sidewinders) on roads on cold evenings at MOJA. Long-nosed Snakes appear to be common throughout MOJA, although they are probably restricted to habitats below the pinyon-juniper zone (Stebbins 2003).

**Western Patch-nosed Snake (*Salvadora hexalepis*).** This diurnal species occurs in desert and shrub habitats below the pinyon-juniper zone at MOJA, and is probably common throughout the Preserve. We observed 14 Western Patch-nosed Snakes at scattered locations, and the species has been collected throughout the Preserve (Appendix C). We frequently found Western Patch-nosed Snakes crossing roads during the day.

**Western Ground Snake (*Sonora semiannulata*).** This small, attractive species has been recorded infrequently at MOJA, and we did not observe it during our surveys. Specimens have been collected from the Providence (Foshay Pass and Goldstone Spring areas) and New York mountains, and at Piute Creek (Appendix C). The New York Mountains specimen was collected on Ivanpah Road, 5.7 miles east of Ivanpah, in yucca-juniper woodland habitat (Brian McGurty, personal communication). Johnson et al. (1948) noted a preserved specimen on display at Mitchell Caverns which was supposedly collected there. Stein and Warrick (1979) reported an earlier observation by Tim Brown a half mile south of Dorner's Camp in the Granite Mountains, in which a pitfall trapped Common Kingsnake regurgitated a Western Ground Snake. The habitat at this location was a bouldery slope in pinyon-juniper woodland at 1,280 m (4,200 ft) elevation (Stein and Warrick 1979). Tate (1981) observed five Western Ground Snakes on rocky or grassy slopes and washes in the Kelso-Old Dad Mountains. Tate (1981) indicated that he deposited four of these specimens at UC Santa Barbara (UCSB 9528-31), and although Kent Beaman's database contains UCSB records, it does not contain these or others from Tate's survey. Western Ground Snakes probably occur in other lower and intermediate elevations throughout MOJA, in areas with some subsurface moisture (Stebbins 2003).

**Southwestern Black-headed Snake (*Tantilla hobartsmithi*).** Stein and Warrick (1979) report a Southwestern Black-headed Snake collected in 1978 in Cottonwood Canyon in the Granite Mountains (Appendix C). Stein and Warrick (1979) also mention two previous sightings in the study area, which may be a reference to the specimens from "Granite Mtns" cited in Tanner (1966) as "UCLA 2 live snakes." Cole and Hardy (1981) cite what are presumably the same two specimens, from "Granite Mtns," as BYU 32371-2. Other surveys in seemingly appropriate habitat at MOJA (e.g., Hazard and Rotenberry 1996, Mitchell 1978, Tate 1981, Ulmer 1983) failed to detect the species, as did we. Southwestern Black-headed snakes occur in a variety of habitats in the region (Stebbins 2003), and it seems likely that this small, secretive species occurs in other places at MOJA.

**Western Lyre Snake (*Trimorphodon biscutatus*).** Bob Macey collected a specimen of Western Lyre Snake at Kelso Dunes in 1986 (Appendix C), which is the only specimen of the species from MOJA known to us. The specimen was found with a chunk missing, and was presumably dropped by an avian predator, which likely caught it in the nearby Granite or Providence Mountains (Bob Macey, personal communication). Stein and Warrick (1979) report on a 1965 observation by Lan Lester of the Los Angeles County Museum at Coyote Spring in the Granites, in habitat described as "Yucca scrub/rocks." Jim Andre (personal communication) also once observed a Western Lyre Snake in the Granites. Tate (1981), who was lucky enough to have obtained a copy of Brown (1976), cited Brown's two observations from MOJA: one at Dawes Siding on the Kelso-Cima Road, and on the Vulcan Mine Road. This primarily nocturnal species

is generally found in rocky habitats in deserts and lower mountain slopes (Stebbins 2003), and may occur throughout much of MOJA.

**Sidewinder (*Crotalus cerastes*).** This was the most frequently observed snake species during our surveys, and is common in sandy desert creosote bush habitats throughout the Preserve. We observed 11 Sidewinders during one night drive along the powerline road near Piute Creek in 2005, and snakes or their tracks were frequently observed at Kelso Dunes.

**Speckled Rattlesnake (*Crotalus mitchellii*).** We observed 16 Speckled Rattlesnakes throughout MOJA during our surveys, and this common species was the characteristic rattlesnake of rocky habitats in the Preserve, from lower mountain slopes up into the pinyon-juniper zone. We rarely surveyed the Cornfield Spring area without observing this species. Compared with other species in the Southwest, Speckled Rattlesnakes are quick to rattle, and most of our sightings at MOJA were of snakes that alerted us to their presence before we saw them, which added to the excitement of many surveys.

**Mojave Rattlesnake (*Crotalus scutulatus*).** We recorded 17 Mojave Rattlesnakes at MOJA, and this species is common in the cactus-yucca scrub and Joshua tree woodland habitats. Although there are likely ecotonal areas where two or three rattlesnakes occur together, in general the three species of rattlesnakes at MOJA exhibit predictable habitat segregation throughout the Preserve, with Sidewinders occurring in the sandy, creosote deserts, Speckled Rattlesnakes in rocky areas, and Mojave Rattlesnakes in the relatively rock-free, mid-elevation habitats.

### Species That Possibly Occur at Mojave National Preserve

**California Treefrog (*Hyla cadaverina*).** The California Treefrog is associated with the southern California mountains, and occurs as close to MOJA as the eastern slope of the Peninsular Ranges (e.g., Little San Bernardino Mountains) and at desert oases (Indian Cove, Fortynine Palms) in Joshua Tree National Park (Gaudin 1979, Miller and Stebbins 1964, Stebbins 2003). Greene and Luke (1996) reported a recent discovery of the species from a “mountain spring on the Granite Mountains Reserve.” Ken Norris, late UCLA herpetologist whose family owns the “bunny club” at Cove Spring within the UC Granite Mountains Desert Research Center reportedly heard California Treefrogs from the cottonwood-lined stream just below Cove Spring (Jim Andre, personal communication). Ken Norris’ brother Bob has a son (Jim) who also claims to have heard them there (Jim Andre, personal communication). Greene and Luke (1996) may be referring to these reports, or to Glenn Stewart’s (Cal Poly-Pomona herpetologist) sightings of tadpoles in upper Granite Cove (Jim Andre, personal communication). Although he initially suspected the tadpoles (which were not collected) to be California Treefrogs, Stewart now believes they were Red-spotted Toads (Glenn Stewart, personal communication). Finally, Jim Andre and Claudia Luke reported hearing the call of a California Treefrog in Bull Canyon around 1996, but never observed the animal (Jim Andre, personal communication). We conducted both daytime walking surveys and nighttime call surveys below Cove Spring, but

observed and heard only Red-spotted Toads. Although it is possible that a relictual population of California Treefrogs could occur in the Granites, the lack of direct evidence suggests that perhaps most or all of the reports are based on misidentifications of aberrant Red-spotted Toad calls. For example, Miller and Stebbins (1964) note that occasional individual Red-spotted Toads give a “wheezy” call, unlike their normal trilling calls. In addition, California Treefrogs generally call both day and night during the breeding season (Stebbins 2003), and it seems unlikely that the presence of a viable population in such a restricted and accessible site as Cove Spring would be so hard to confirm. Although it is hard to ignore a report by an eminent herpetologist like Ken Norris, a final possibility is that California Treefrogs were at one time introduced at Cove Spring.

**Western Rattlesnake (*Crotalus viridis*).** Two similar dark-colored subspecies of the Western Rattlesnake, the Southern Pacific Rattlesnake (*C. v. helleri*) in coastal California and the Arizona Black Rattlesnake (*C. v. cerberus*) in Arizona, occur to the west and east, respectively, of MOJA. Recent research has regarded these two forms as either subspecies (*C. oreganus cerberus* and *C. o. helleri*) within a western clade of former Western Rattlesnake subspecies (e.g., Ashton and de Queiroz 2001) or as the separate species *C. cerberus* and *C. helleri* (Brennan and Holycross 2006, Douglas et al. 2002). Greene and Luke (1996) suggested, based on the similarity of juveniles of each form, that the two subspecies may have become geographically separated only recently, and that relictual populations of one or the other subspecies (or a new, undescribed form) could occur in the high mountain ranges of the eastern Mojave Desert. Brian McGurty, while conducting herpetofauna surveys for BLM in 1977, heard a rumor of “black rattlesnakes” occurring in the extreme northern end of the New York Mountains (Brian McGurty, personal communication). Although probably referring to darker than usual Speckled Rattlesnakes, which are the only species known from the higher elevations at MOJA, the description of “black” rattlesnakes is intriguing, as we have never seen, at MOJA or elsewhere, a Speckled Rattlesnake that could be described as such. Based on habitat availability, relict populations of Western Rattlesnake would be most likely in the rocky, wooded upper elevations of the Providence, New York, or Clark Mountains.

**Appendix B.** Contact information for experts consulted during an inventory of amphibians and reptiles at Mojave National Preserve.

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P.O. Box 101  
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Glenn Stewart, Professor Emeritus  
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California State Polytechnic University  
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(909) 869-4093  
[grstewart@csupomona.edu](mailto:grstewart@csupomona.edu)

**Appendix C.** Amphibian and reptile specimen records from Mojave National Preserve, San Bernardino County, California, arranged alphabetically by scientific name. Catalog numbers not preceded by a museum letter code are those in the Los Angeles County Natural History Museum (LACM). See text for museum acronyms.

Catalog Number	Genus	Species	Collector	Date	Locality
138133	<i>Arizona</i>	<i>elegans</i>	RB Loomis	6/2/1977	4.2 mi. N Kelso on Kelbaker Rd.
74061	<i>Arizona</i>	<i>elegans</i>	C.M. Bogert	7/6/1949	5 miles E. baker
138134	<i>Arizona</i>	<i>elegans</i>	RB Loomis	6/3/1977	8.5 mi. NW Kelso on Kelbaker Rd.
MVZ 207917	<i>Arizona</i>	<i>elegans</i>	B. R. Moon	5/18/1987	Black Canyon Rd., 0.5 mi N Essex Rd.
MVZ 172991	<i>Arizona</i>	<i>elegans</i>	C. Markmann	5/26/1978	Cima Rd., 3 mi N Interstate 15
MVZ 172992	<i>Arizona</i>	<i>elegans</i>	C. Markmann	5/10/1978	Cima Rd., 8 mi N Interstate 15
MVZ 172993	<i>Arizona</i>	<i>elegans</i>	C. Markmann	6/3/1978	Cima Rd., 8 mi N Interstate 15
MVZ 173537	<i>Arizona</i>	<i>elegans</i>	Stephen D. Busack , Fabian M. Jaksic	5/7/1980	Essex, 11 mi NW on Essex Rd.
MVZ 173538	<i>Arizona</i>	<i>elegans</i>	Stephen D. Busack , Fabian M. Jaksic	5/7/1980	Essex, 13 mi NW on Essex Rd.
MVZ 173539	<i>Arizona</i>	<i>elegans</i>	Stephen D. Busack , Fabian M. Jaksic	5/7/1980	Essex, 13 mi NW on Essex Rd.
UCR-GMR 40	<i>Arizona</i>	<i>elegans</i>	Minden, R. L.	4/24/1978	Granite Mountains, 5 miles NNE I-40 on Kelbaker Rd. T. 8N R 13E Sect. 20
CAS 202621	<i>Arizona</i>	<i>elegans</i>	J.A. Gauthier	5/18/1996	Kelbaker Rd, 2 mi N of Granite Pass
UCR-GMR 72	<i>Arizona</i>	<i>elegans</i>	Coupe, B.	5/13/2001	Kelbaker Rd. N 34 50' 36.8" W 115 37' 44.0"
MVZ 207916	<i>Arizona</i>	<i>elegans</i>	B. R. Moon	4/28/1987	Kelbaker Rd., 14.8 mi N Hwy. 40
UCR-GMR 38	<i>Arizona</i>	<i>elegans</i>	Keller, Autumn	4/20/1990	Kelbaker Rd., 2 km S. Route 40
UCR-GMR 39	<i>Arizona</i>	<i>elegans</i>	Secor, Stephen	4/15/1989	Kelbaker Rd., 2 miles south of Kelso R13E T10N
MVZ 214633	<i>Arizona</i>	<i>elegans</i>	Claudia A. Luke, Steven Secor	5/16/1988	Kelbaker Rd., 3 mi S Kelso
MVZ 214632	<i>Arizona</i>	<i>elegans</i>	Claudia A. Luke, Steven Secor	5/31/1988	Kelbaker Rd., 3.3 mi S Kelso
UCR-GMR 42	<i>Arizona</i>	<i>elegans</i>	Luke, C.	9/12/1995	Kelbaker Rd., 3.4 miles W of turn off to Granite Mtns Desert Research Center
UCR-GMR 41	<i>Arizona</i>	<i>elegans</i>	Luke, C.	5/13/1996	Kelbaker Rd., 4.1 miles N of I-40
MVZ 207918	<i>Arizona</i>	<i>elegans</i>	B. R. Moon	6/16/1987	Kelbaker Rd., 8.7 mi N Kelso
MVZ 207915	<i>Arizona</i>	<i>elegans</i>	B. R. Moon	4/7/1987	Kelbaker Rd., 8.8 mi S Vulcan Mine Rd., Providence Mts.
SDNHM Z57034	<i>Arizona</i>	<i>elegans</i>	Garstka, Bill	5/15/1970	Kelso, 1 mi. E. of, on Kelso Cima Rd
UCR-GMR 37	<i>Arizona</i>	<i>elegans</i>	Luke, C.	6/3/1998	Mojave National Preserve, 2 miles N of Granite Pass on Kelbaker Rd.
102127	<i>Arizona</i>	<i>elegans</i>	GL Simpson	5/17/1969	on rd, 0.4 mi S. Kelso
UCR-GMR 36	<i>Arizona</i>	<i>elegans</i>	Luke, C.	6/11/1998	Sweeney Granite Mountains Desert Research Center, 30 ft W of Kelbaker Rd. on dirt road to Bunny Club
MVZ 206246	<i>Bufo</i>	<i>punctatus</i>	A. D. Driscoll	5/10/1986	"Granite Mt. Plateau, 17 mi [Air] S Kelso, Granite Mts."
MVZ 28365	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28366	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28367	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28368	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28369	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28370	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28371	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28372	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28373	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28374	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 28375	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28376	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28377	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28378	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28379	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28380	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28381	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28382	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28383	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28384	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28385	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28386	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28387	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28388	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28389	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28390	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28391	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 28392	<i>Bufo</i>	<i>punctatus</i>	Ronald W. Smith	5/31/1939	"Pachalka Spr., Clark Mt."
MVZ 26280	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	5/24/1938	[Providence Mts.] Cedar Canyon
MVZ 26281	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	5/24/1938	[Providence Mts.] Cedar Canyon
MVZ 26282	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	5/24/1938	[Providence Mts.] Cedar Canyon
MVZ 26283	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	5/24/1938	[Providence Mts.] Cedar Canyon
MVZ 26284	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	5/25/1938	[Providence Mts.] Cedar Canyon
MVZ 26285	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	5/25/1938	[Providence Mts.] Cedar Canyon
MVZ 26286	<i>Bufo</i>	<i>punctatus</i>	David H. Johnson	5/26/1938	[Providence Mts.] Cedar Canyon
MVZ 26288	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	6/8/1938	[Providence Mts.] Cedar Canyon
MVZ 26289	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	6/8/1938	[Providence Mts.] Cedar Canyon
MVZ 26290	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	6/8/1938	[Providence Mts.] Mitchell's Caverns
MVZ 26291	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	6/8/1938	[Providence Mts.] Mitchell's Caverns
MVZ 26287	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	5/30/1938	[Providence Mts.] Rock Spr.
MVZ 26672	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	5/27/1938	[Providence Mts.] Rock Spr. LOT OF 6 TADPOLES
MVZ 26673	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	5/27/1938	[Providence Mts.] Rock Spr. LOT OF CA. 15 TADPOLES
MVZ 26674	<i>Bufo</i>	<i>punctatus</i>	Thomas L. Rodgers	5/30/1938	[Providence Mts.] Rock Spr. LOT OF 6 TADPOLES
122415	<i>Bufo</i>	<i>punctatus</i>	LA Lester & TC Olmstead	4/21/1976	Coyote Springs, 11 mi. S, 1 mi. W Kelso T9N R12E Sec 24 SE 1/4
122416	<i>Bufo</i>	<i>punctatus</i>	LA Lester & TC Olmstead	4/21/1976	Coyote Springs, 11 mi. S, 1 mi. W Kelso T9N R12E Sec 24 SE 1/4
127297	<i>Bufo</i>	<i>punctatus</i>	J P & KE Donahue	10/6/1973	Ft Piute, E side Piute Range, T12N, R18E, SE 1/4 Sec 13
105693	<i>Bufo</i>	<i>punctatus</i>	WC Welbourn	4/13/1970	Granite Mountains, 20 mi. N Amboy
UCR-GMR 78	<i>Bufo</i>	<i>punctatus</i>	Minden, R. L.	5/18/1978	Granite Mtns dripping Sp. T 8N R 12E Sect. 17
UCR-GMR 79	<i>Bufo</i>	<i>punctatus</i>	Minden, R. L.	5/18/1978	Granite Mtns dripping Sp. T 8N R 12E Sect. 17
22868	<i>Bufo</i>	<i>punctatus</i>	Porter	6/12/1965	Granite Mtns.
23247	<i>Bufo</i>	<i>punctatus</i>	Porter	5/15/1965	Granite Mtns.
23248	<i>Bufo</i>	<i>punctatus</i>	Porter	5/16/1965	Granite Mtns.
23249	<i>Bufo</i>	<i>punctatus</i>	Porter	5/17/1965	Granite Mtns.
23250	<i>Bufo</i>	<i>punctatus</i>	Porter	5/15/1965	Granite Mtns.
23251	<i>Bufo</i>	<i>punctatus</i>	Porter	5/15/1965	Granite Mtns.
23252	<i>Bufo</i>	<i>punctatus</i>	Porter & Brown	6/12/1965	Granite Mtns.
23253	<i>Bufo</i>	<i>punctatus</i>	Ahearu	4/24/1965	Granite Mtns.
74551	<i>Bufo</i>	<i>punctatus</i>	C. Mc Laughlin	4/24/1965	Granite Mtns
74552	<i>Bufo</i>	<i>punctatus</i>	C. McLaughlin	4/24/1965	Granite Mtns

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 35583	<i>Bufo</i>	<i>punctatus</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35584	<i>Bufo</i>	<i>punctatus</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35585	<i>Bufo</i>	<i>punctatus</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35586	<i>Bufo</i>	<i>punctatus</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35587	<i>Bufo</i>	<i>punctatus</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35588	<i>Bufo</i>	<i>punctatus</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35589	<i>Bufo</i>	<i>punctatus</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35590	<i>Bufo</i>	<i>punctatus</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35591	<i>Bufo</i>	<i>punctatus</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35592	<i>Bufo</i>	<i>punctatus</i>	Milton Hildebrand	6/25/1940	Pass betw. Granite & Providence Mts.
MVZ 35593	<i>Bufo</i>	<i>punctatus</i>	Milton Hildebrand	6/25/1940	Pass betw. Granite & Providence Mts.
MVZ 35594	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/25/1940	Pass betw. Granite & Providence Mts.
MVZ 35595	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/25/1940	Pass betw. Granite & Providence Mts.
MVZ 35596	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35597	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35598	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35599	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35600	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35601	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35602	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35603	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35604	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35605	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35606	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35607	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35608	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/23/1940	Pass betw. Granite & Providence Mts.
MVZ 35609	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/24/1940	Pass betw. Granite & Providence Mts.
MVZ 35610	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/24/1940	Pass betw. Granite & Providence Mts.
MVZ 35611	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/24/1940	Pass betw. Granite & Providence Mts.
MVZ 35612	<i>Bufo</i>	<i>punctatus</i>	Harvey I. Fisher	6/24/1940	Pass betw. Granite & Providence Mts.
MVZ 172761	<i>Bufo</i>	<i>punctatus</i>	B. M. McGurty	6/5/1977	Piute Cr.
MVZ 172762	<i>Bufo</i>	<i>punctatus</i>	B. M. McGurty	6/5/1977	Piute Cr.
MVZ 172763	<i>Bufo</i>	<i>punctatus</i>	B. M. McGurty	6/5/1977	Piute Cr.
SDNHM Z29671	<i>Bufo</i>	<i>punctatus</i>	Rodgers, Tom	5/24/1938	Providence Mts., Cedar Canyon
SDNHM Z29672	<i>Bufo</i>	<i>punctatus</i>	Rodgers, Tom	6/8/1938	Providence Mts., Mitchell's Caverns
67323	<i>Callisaurus</i>	<i>draconoides</i>	R.G. Crippen	5/31/1970	10 mi E, 7.5 mi S Cima
UCR-GMR 18	<i>Callisaurus</i>	<i>draconoides</i>	Luke, C.	9/30/1997	0.2 miles N of Entrance gate on Granite Cove Rd. Sweeney Granite Mountains Desert Research Center T. 8N R. 13E Sect. 18 SE 1/4
MVZ 26326	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	5/30/1938	0.5 mi NE Barnwell
MVZ 26327	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/5/1938	1.5 mi SE Rock Spr., Providence Mts.
MVZ 35686	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	6/26/1940	1.5 mi WSW Hidden Hill Mine, Providence Mts.
122417	<i>Callisaurus</i>	<i>draconoides</i>	LA Lester & TC Olmstead	4/29/1976	11.7 mi. S, 9.6 mi. W. Kelso T9N R10E Sec 26 SE 1/4
122418	<i>Callisaurus</i>	<i>draconoides</i>	LA Lester & TC Olmstead	4/29/1976	11.7 mi. S, 9.6 mi. W. Kelso T9N R10E Sec 26 SE 1/4
MVZ 172815	<i>Callisaurus</i>	<i>draconoides</i>	J.V.M.	7/8/1978	2.0 mi W of Green's Well
MVZ 35643	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35644	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35645	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35646	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35647	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35648	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35649	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35650	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 35651	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35652	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35653	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35654	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35655	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35656	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35657	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35658	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35659	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35660	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35661	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35662	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35663	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35664	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35665	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35666	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35667	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35668	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35669	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35670	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35671	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35672	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	6/21/1940	2.5 mi SW Kelso
MVZ 35673	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35674	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35675	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35676	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35677	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35678	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35679	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35680	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35681	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35682	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35683	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/20/1940	2.5 mi SW Kelso
MVZ 35684	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/20/1940	2.5 mi SW Kelso
MVZ 35685	<i>Callisaurus</i>	<i>draconoides</i>	Milton Hildebrand	6/21/1940	2.5 mi SW Kelso
MVZ 39227	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/21/1940	2.5 mi SW Kelso
MVZ 39228	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/21/1940	2.5 mi SW Kelso
MVZ 39229	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/21/1940	2.5 mi SW Kelso
MVZ 39230	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/21/1940	2.5 mi SW Kelso
MVZ 39231	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/21/1940	2.5 mi SW Kelso
MVZ 39232	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/21/1940	2.5 mi SW Kelso
MVZ 39233	<i>Callisaurus</i>	<i>draconoides</i>	Harvey I. Fisher	6/21/1940	2.5 mi SW Kelso
MVZ 26325	<i>Callisaurus</i>	<i>draconoides</i>	David H. Johnson	5/15/1938	5 mi WSW Ivanpah
137884	<i>Callisaurus</i>	<i>draconoides</i>	RB Loomis	3/6/1977	7.4 mi. E Baker on Kelbaker Rd.
MVZ 28435	<i>Callisaurus</i>	<i>draconoides</i>	Aldo S. Leopold	5/28/1939	8 mi W Clark Mt.
MVZ 28436	<i>Callisaurus</i>	<i>draconoides</i>	Aldo S. Leopold	5/28/1939	8 mi W Clark Mt.
MVZ 28437	<i>Callisaurus</i>	<i>draconoides</i>	Aldo S. Leopold	5/28/1939	8 mi W Clark Mt.
MVZ 28438	<i>Callisaurus</i>	<i>draconoides</i>	Aldo S. Leopold	5/28/1939	8 mi W Clark Mt.
MVZ 26336	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/10/1938	8.5 mi NW Essex
122419	<i>Callisaurus</i>	<i>draconoides</i>	LA Lester & TC Olmstead	4/19/1976	9 mi. S. 4 mi. W. Kelso
122420	<i>Callisaurus</i>	<i>draconoides</i>	LA Lester & TC Olmstead	4/19/1976	9 mi. S. 4 mi. W. Kelso
122421	<i>Callisaurus</i>	<i>draconoides</i>	LA Lester & TC Olmstead	4/19/1976	9 mi. S. 4 mi. W. Kelso

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
147844	<i>Callisaurus</i>	<i>draconoides</i>	S.A. Smith	3/17/1972	Barnwell, 7.0 mi SE of Ivanpah, New York Mtns.
147844	<i>Callisaurus</i>	<i>draconoides</i>	S.A. Smith	3/17/1972	Barnwell, 7.0 mi SE of Ivanpah, New York Mtns.
MVZ 207873	<i>Callisaurus</i>	<i>draconoides</i>	B. R. Moon	4/23/1987	Canyon N of Vulcan Mine, Providence Mts.
MVZ 207874	<i>Callisaurus</i>	<i>draconoides</i>	B. R. Moon	4/23/1987	Canyon N of Vulcan Mine, Providence Mts.
MVZ 207875	<i>Callisaurus</i>	<i>draconoides</i>	B. R. Moon	4/23/1987	Canyon N of Vulcan Mine, Providence Mts.
MVZ 172814	<i>Callisaurus</i>	<i>draconoides</i>	J.V.M.	5/12/1978	Cima Rd., 8 mi N of Int. 15
SDNHM Z29662	<i>Callisaurus</i>	<i>draconoides</i>	Rodgers, Tom	6/9/1938	Colton Well
SDNHM Z29663	<i>Callisaurus</i>	<i>draconoides</i>	Rodgers, Tom	6/9/1938	Colton Well
MVZ 26328	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26329	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26330	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26331	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26332	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26333	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 26334	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 26335	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 146236	<i>Callisaurus</i>	<i>draconoides</i>	E. Wessman	5/12/1976	E Ivanpah Valley
MVZ 146233	<i>Callisaurus</i>	<i>draconoides</i>	E. Wessman	5/11/1976	Fenner Vt. [Powerline road]
MVZ 207870	<i>Callisaurus</i>	<i>draconoides</i>	B. R. Moon	4/12/1987	Globe Mine Rd. at Railroad Tracks, Providence Mts.
UCR-GMR 16	<i>Callisaurus</i>	<i>draconoides</i>	Minden, R. L.	4/10/1978	Granite Mountains, Bull Wash
MVZ 172818	<i>Callisaurus</i>	<i>draconoides</i>	J.V.M.	5/26/1978	Ivanpah Spr.
CAS 174461	<i>Callisaurus</i>	<i>draconoides</i>	J.P. O'Brien	6/4/1988	Kelbaker Rd, 3 - 11 mi S Baker
CAS 174460	<i>Callisaurus</i>	<i>draconoides</i>	J.P. O'Brien	6/4/1988	Kelbaker Rd, 3-11 mi S Baker
CAS 162500	<i>Callisaurus</i>	<i>draconoides</i>	D. Herlocker	4/22/1987	Kelbaker Rd, between Kelso and Baker
MVZ 207876	<i>Callisaurus</i>	<i>draconoides</i>	B. R. Moon	6/13/1987	Kelbaker Rd., 17.7 mi N of Hwy. 40
UCR-GMR 17	<i>Callisaurus</i>	<i>draconoides</i>	Secor, Stephen	4/18/1989	Kelbaker Rd., 7 miles SE of Kelso
MVZ 199450	<i>Callisaurus</i>	<i>draconoides</i>	Kevin de Queiroz Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199451	<i>Callisaurus</i>	<i>draconoides</i>	Kevin de Queiroz Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 214843	<i>Callisaurus</i>	<i>draconoides</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
52820	<i>Callisaurus</i>	<i>draconoides</i>	Knox	4/12/1959	Kelso Dunes, 7 mi. S, 4 mi. W Kelso
126148	<i>Callisaurus</i>	<i>draconoides</i>	W D Haache, L A Lester, &R L Beay	7/1/1977	Kelso Dunes, 9 mi S, 3 mi W Kelso
CAS 190153	<i>Callisaurus</i>	<i>draconoides</i>	D.L. Martin	3/29/1988	Kelso Sand Dunes
123318	<i>Callisaurus</i>	<i>draconoides</i>	RN Shirley	3/17/1972	Lanfair Valley, 12.0 mi S Ivanpah
MVZ 26337	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/10/1938	Mitchell's Caverns, Providence Mts.
MVZ 26338	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/10/1938	Mitchell's Caverns, Providence Mts.
MVZ 26339	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/10/1938	Mitchell's Caverns, Providence Mts.
MVZ 28434	<i>Callisaurus</i>	<i>draconoides</i>	Ronald W. Smith	5/26/1939	N side Clark Mt.
MVZ 26340	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/11/1938	Pass betw. Granite & Providence Mts.
MVZ 26341	<i>Callisaurus</i>	<i>draconoides</i>	Thomas L. Rodgers	6/11/1938	Pass betw. Granite & Providence Mts.
MVZ 172819	<i>Callisaurus</i>	<i>draconoides</i>	B. M. McGurty	6/12/1977	Piute Cr.
MVZ 207871	<i>Callisaurus</i>	<i>draconoides</i>	B. R. Moon	4/20/1987	S side Vulcan Mine Rd., ca. 2.25 mi E Kelbaker Rd., Providence Mts.
MVZ 207872	<i>Callisaurus</i>	<i>draconoides</i>	B. R. Moon	4/20/1987	S side Vulcan Mine Rd., ca. 2.25 mi E Kelbaker Rd., Providence Mts.
137882	<i>Callisaurus</i>	<i>draconoides</i>		5/1/1977	Soda Springs, 1 mi. S Zzyzx Center
MVZ 161448	<i>Callisaurus</i>	<i>draconoides</i>	Robert L. Seib	6/12-13 /78	vicinity of Kelso Dunes
MVZ 161449	<i>Callisaurus</i>	<i>draconoides</i>	Robert L. Seib	6/12-13 /78	vicinity of Kelso Dunes
MVZ 161450	<i>Callisaurus</i>	<i>draconoides</i>	Robert L. Seib	6/12-13 /78	vicinity of Kelso Dunes
MVZ 161451	<i>Callisaurus</i>	<i>draconoides</i>	Robert L. Seib	6/12-13 /78	vicinity of Kelso Dunes
MVZ 161452	<i>Callisaurus</i>	<i>draconoides</i>	Robert L. Seib	6/12-13 /78	vicinity of Kelso Dunes
MVZ 146235	<i>Callisaurus</i>	<i>draconoides</i>	E. Wessman	5/12/1976	W Ivanpah Valley

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 207902	<i>Charina</i>	<i>trivirgata</i>	B. R. Moon	4/8/1987	Bonanza King Mine, Providence Mts.
MVZ 215985	<i>Charina</i>	<i>trivirgata</i>	H. W. Greene (F. Smith)	5/25/1990	Cove Spring, Granite Mts.
MVZ 172983	<i>Charina</i>	<i>trivirgata</i>	B. M. McGurty	22 JUN-14 JUL 1977.	Mitchell's Caverns
MVZ 172984	<i>Charina</i>	<i>trivirgata</i>	B. M. McGurty	22 JUN-14 JUL 1977.	Mitchell's Caverns
MVZ 172985	<i>Charina</i>	<i>trivirgata</i>	B. M. McGurty	22 JUN-14 JUL 1977	Mitchell's Caverns
MVZ 26648	<i>Charina</i>	<i>trivirgata</i>	Thomas L. Rodgers	6/10/1938	Mitchell's Caverns, Providence Mts.
2149	<i>Charina</i>	<i>trivirgata</i>	C. Dammers	4/11/1936	San Bernardino; Bonanza Mine
MVZ 207903	<i>Charina</i>	<i>trivirgata</i>	B. R. Moon	6/13/1987	Vulcan Mine Rd., 5.2 mi SE Kelbaker Rd., Providence Mts.
126240	<i>Chionactis</i>	<i>occipitalis</i>	R.L. Bezy, LA Lester, W Haocke	7/1/1977	.1 mi. (by RR rd) WSW Kelso
MVZ 214647	<i>Chionactis</i>	<i>occipitalis</i>	A. L. Schuler, S. Secor	6/20/1988	4 mi S Kelso off Kelbaker Rd.
MVZ 193305	<i>Chionactis</i>	<i>occipitalis</i>	Harry W. Greene	5/28/1984	6.3 mi S Kelso on Kelbaker Rd.
MVZ 172998	<i>Chionactis</i>	<i>occipitalis</i>	C. Markmann, J.V.M.	6/9/1978	8 mi N of Interstate 15, Cima Rd.
MVZ 172999	<i>Chionactis</i>	<i>occipitalis</i>	C. Markmann, J.V.M.	6/9/1978	8 mi N of Interstate 15, Cima Rd.
138144	<i>Chionactis</i>	<i>occipitalis</i>	LC Jones	5/1/1977	dirt road 0.7 mi. W Zzyzx Mineral Springs
CAS 201496	<i>Chionactis</i>	<i>occipitalis</i>	J.A. Gauthier	7/16/1992	Kelbaker
MVZ 214649	<i>Chionactis</i>	<i>occipitalis</i>	Claudia Luke, S. Secor	5/31/1988	Kelbaker Rd., 0.2 mi S Kelso
MVZ 214640	<i>Chionactis</i>	<i>occipitalis</i>	Claudia A. Luke	5/28/1988	Kelbaker Rd., 6.6 mi N Kelso
YPM 13406	<i>Chionactis</i>	<i>occipitalis</i>	Jacques A. Gauthier	5/21/2001	Mojave Desert National Preserve; N35.015500 W115.647200; N35.022100 W115.636500; N35.049300 W115.605300; N35.055200 W115.601900
138145	<i>Chionactis</i>	<i>occipitalis</i>	J Yemper, K Vascooy	5/13/1978	S of Baker off Kelbaker Rd
MVZ 161548	<i>Chionactis</i>	<i>occipitalis</i>	Robert L. Seib	12-13 June 1978.	vicinity Kelso Dunes
MVZ 161549	<i>Chionactis</i>	<i>occipitalis</i>	Robert L. Seib	12-13 June 1978.	vicinity Kelso Dunes
UCR-GMR 3	<i>Cnemidophorus</i>	<i>tigris</i>	-		-
UCR-GMR 4	<i>Cnemidophorus</i>	<i>tigris</i>	-		-
MVZ 172967	<i>Cnemidophorus</i>	<i>tigris</i>	T. W. Brown	5/13/1978	0.25 mi S Soda Spr.
MVZ 172968	<i>Cnemidophorus</i>	<i>tigris</i>	T. W. Brown	5/13/1978	0.25 mi S Soda Spr.
MVZ 26589	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/6/1938	1 mi SE Rock Spr., Providence Mts.
MVZ 26590	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/6/1938	1 mi SE Rock Spr., Providence Mts.
MVZ 26591	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/6/1938	1 mi SE Rock Spr., Providence Mts.
MVZ 26592	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/6/1938	1 mi SE Rock Spr., Providence Mts.
MVZ 26593	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/6/1938	1 mi SE Rock Spr., Providence Mts.
MVZ 26594	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/6/1938	1 mi SE Rock Spr., Providence Mts.
MVZ 26595	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/6/1938	1 mi SE Rock Spr., Providence Mts.
MVZ 26596	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/6/1938	1 mi SE Rock Spr., Providence Mts.
MVZ 26597	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/6/1938	1 mi SE Rock Spr., Providence Mts.
67324	<i>Cnemidophorus</i>	<i>tigris</i>	R.G. Crippen	5/31/1970	10 mi E, 7.5 mi S Cima
122452	<i>Cnemidophorus</i>	<i>tigris</i>	LA Lester & TC Olmstead	4/20/1976	11 mi. S, 1 mi. W Kelso
MVZ 26584	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/5/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 26585	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/5/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 26586	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/5/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 26587	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/5/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 26588	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/5/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 26435	<i>Cnemidophorus</i>	<i>tigris</i>	M. D. Arvey	5/12/1938	2 mi NNE Cima
MVZ 26436	<i>Cnemidophorus</i>	<i>tigris</i>	David H. Johnson	5/13/1938	2 mi NNE Cima
MVZ 26437	<i>Cnemidophorus</i>	<i>tigris</i>	David H. Johnson	5/15/1938	2 mi NNE Cima
MVZ 26438	<i>Cnemidophorus</i>	<i>tigris</i>	David H. Johnson	5/16/1938	2 mi NNE Cima
MVZ 172963	<i>Cnemidophorus</i>	<i>tigris</i>	J.V.M.	7/21/1978	2 mi W Green's Well
MVZ 35872	<i>Cnemidophorus</i>	<i>tigris</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35873	<i>Cnemidophorus</i>	<i>tigris</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35874	<i>Cnemidophorus</i>	<i>tigris</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 35875	<i>Cnemidophorus</i>	<i>tigris</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 39235	<i>Cnemidophorus</i>	<i>tigris</i>	Milton Hildebrand	6/21/1940	2.5 mi SW Kelso
MVZ 39236	<i>Cnemidophorus</i>	<i>tigris</i>	David H. Johnson	6/20/1940	2.5 mi SW Kelso
MVZ 173532	<i>Cnemidophorus</i>	<i>tigris</i>	Stephen D. Busack	5/8/1980	21 mi [Air] NW Essex, 3.2 mi N Essex Rd. on Black Canyon Rd.
MVZ 31724	<i>Cnemidophorus</i>	<i>tigris</i>	R. R. Miller	7/3/1939	3 mi S Baker
36591	<i>Cnemidophorus</i>	<i>tigris</i>	Lester & Northern	5/25/1967	3 mi S, 7 mi E Cima
134279	<i>Cnemidophorus</i>	<i>tigris</i>	PA Media	3-9 June 1981	4 mi NW Irarpah
134280	<i>Cnemidophorus</i>	<i>tigris</i>	PA Media	3-9 June 1981	4 mi NW Irarpah
134281	<i>Cnemidophorus</i>	<i>tigris</i>	PA Media	3-9 June 1981	4 mi NW Irarpah
134282	<i>Cnemidophorus</i>	<i>tigris</i>	PA Media	3-9 June 1981	4 mi NW Irarpah
134283	<i>Cnemidophorus</i>	<i>tigris</i>	PA Media	8/1/1981	4 mi NW Irarpah
134284	<i>Cnemidophorus</i>	<i>tigris</i>	PA Media	7/13/1981	4 mi NW Irarpah
134285	<i>Cnemidophorus</i>	<i>tigris</i>	PA Media	10-15 Aug 1981	4 mi NW Irarpah
36594	<i>Cnemidophorus</i>	<i>tigris</i>	Lester & Northern	5/26/1967	4 mi S, 5 mi E Cima
36595	<i>Cnemidophorus</i>	<i>tigris</i>	Lester & Northern	5/26/1967	4 mi S, 5 mi E Cima
36596	<i>Cnemidophorus</i>	<i>tigris</i>	Lester & Northern	5/26/1967	4 mi S, 5 mi E Cima
MVZ 26476	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/27/1938	5 mi SE Cima, Providence Mts.
MVZ 28514	<i>Cnemidophorus</i>	<i>tigris</i>	Monroe D. Bryant (#86)	5/28/1939	8 mi W Clark Mt.
MVZ 26618	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/10/1938	8.5 mi NW Essex
MVZ 26619	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/10/1938	8.5 mi NW Essex
MVZ 26620	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/10/1938	8.5 mi NW Essex
132386	<i>Cnemidophorus</i>	<i>tigris</i>	T Brown	4/24/1966	9 miles N Cima, Allured Mine
UAZ 30496	<i>Cnemidophorus</i>	<i>tigris</i>	K. Asplund, T. Brown	4/24/1966	Allured Mine, 9 mi N Cima
MVZ 172959	<i>Cnemidophorus</i>	<i>tigris</i>	B. M. McGuerty	6/4/1977	Cedar Canyon
MVZ 172960	<i>Cnemidophorus</i>	<i>tigris</i>	B. M. McGuerty	6/4/1977	Cedar Canyon
MVZ 26440	<i>Cnemidophorus</i>	<i>tigris</i>	M. D. Arvey	5/21/1938	Cedar Canyon, Providence Mts.
MVZ 26441	<i>Cnemidophorus</i>	<i>tigris</i>	M. D. Arvey	5/21/1938	Cedar Canyon, Providence Mts.
MVZ 26442	<i>Cnemidophorus</i>	<i>tigris</i>	M. D. Arvey	5/22/1938	Cedar Canyon, Providence Mts.
MVZ 26443	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/25/1938	Cedar Canyon, Providence Mts.
MVZ 26444	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/25/1938	Cedar Canyon, Providence Mts.
MVZ 26445	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/25/1938	Cedar Canyon, Providence Mts.
MVZ 26446	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/25/1938	Cedar Canyon, Providence Mts.
MVZ 26447	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/25/1938	Cedar Canyon, Providence Mts.
MVZ 26448	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/25/1938	Cedar Canyon, Providence Mts.
MVZ 26449	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/25/1938	Cedar Canyon, Providence Mts.
MVZ 26450	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/25/1938	Cedar Canyon, Providence Mts.
MVZ 26451	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26452	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26453	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26454	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26455	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26456	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26457	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26458	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26459	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26460	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26461	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26462	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26463	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26464	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26465	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26466	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26467	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26468	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26469	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26470	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.

## **Appendix C, continued.**

## **Appendix C, continued.**

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 32238	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/28/1938	Cedar Canyon, Providence Mts.
MVZ 172961	<i>Cnemidophorus</i>	<i>tigris</i>	J.V.M.	6/3/1978	Cima Rd., 8 mi N of Interstate 15
MVZ 172962	<i>Cnemidophorus</i>	<i>tigris</i>	J.V.M.	6/3/1978	Cima Rd., 8 mi N of Interstate 15
SDNHM Z12827	<i>Cnemidophorus</i>	<i>tigris</i>	Searl, Clyde	7/18/1929	Clark Mountains, 84 miles E Barstow
MVZ 26598	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26599	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26600	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26601	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26602	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26603	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26604	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26605	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26606	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 26607	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 26608	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 26609	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 26610	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 26611	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 26612	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 207847	<i>Cnemidophorus</i>	<i>tigris</i>	B. R. Moon	4/6/1987	Cornfield Spring Access Rd. near Lowest Mt. Ridge, Providence Mts.
122449	<i>Cnemidophorus</i>	<i>tigris</i>	LA Lester & TC Olmstead	4/24/1976	Coyote Springs; 11 mi. S, 1 mi. W. Kelso T 9N, R 12E, Sec 24, SE 1/4
MVZ 146256	<i>Cnemidophorus</i>	<i>tigris</i>	E. Wessman	5/12/1976	E Ivanpah Valley
100430	<i>Cnemidophorus</i>	<i>tigris</i>	TM Peters	4/11/1959	E slope Kelso Dunes, 9 mi SW Kelso
MVZ 146253	<i>Cnemidophorus</i>	<i>tigris</i>	E. Wessman	5/11/1976	Fenner Valley [Powerline road]
132387	<i>Cnemidophorus</i>	<i>tigris</i>	Trap-Campbell	April-May 1966	Granite Mountains
132388	<i>Cnemidophorus</i>	<i>tigris</i>	Trap-Campbell	April-May 1966	Granite Mountains
UCR-GMR 7	<i>Cnemidophorus</i>	<i>tigris</i>	Minden, R. L.	5/9/1978	Granite Mountains, Willow Spring Basin Wash T. 8N R. 12E Sect. 23
23286	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23287	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23288	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23289	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23290	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23291	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23292	<i>Cnemidophorus</i>	<i>tigris</i>	Ahearu	4/24/1965	Granite Mtns.
23293	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23294	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23295	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23296	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23297	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23298	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23299	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23300	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23301	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23302	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23303	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23304	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23305	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23306	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23307	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23308	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23309	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23310	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23311	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23312	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
23313	<i>Cnemidophorus</i>	<i>tigris</i>	Porter		Granite Mtns.
23314	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23315	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23316	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23317	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23318	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	7/17/1965	Granite Mtns.
23319	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23320	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23321	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23322	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23323	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
23324	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	5/15/1965	Granite Mtns.
23325	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	4/24/1965	Granite Mtns.
23326	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mtns.
22468	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mts.
22469	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mts.
22472	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mts.
22473	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mts.
22478	<i>Cnemidophorus</i>	<i>tigris</i>	Porter	6/12/1965	Granite Mts.
UAZ 30510-11	<i>Cnemidophorus</i>	<i>tigris</i>	K. Asplund	April-May 1966	Granite Mts.
MVZ 206245	<i>Cnemidophorus</i>	<i>tigris</i>	A. D. Driscoll (#17)	9/5/1986	Granite Mts. Plateau, Granite Mts.
62423	<i>Cnemidophorus</i>	<i>tigris</i>	K.S. Norris	9/18/1965	Granite Mts., Cove Spr. 2A
62424	<i>Cnemidophorus</i>	<i>tigris</i>	K.S. Norris	9/18/1965	Granite Mts., Cove Spr. 3B
62425	<i>Cnemidophorus</i>	<i>tigris</i>	K.S. Norris	9/18/1965	Granite Mts., Cove Spr. 9A
62422	<i>Cnemidophorus</i>	<i>tigris</i>	K.S. Norris	9/18/1965	Granite Mts., Granite 13A
62420	<i>Cnemidophorus</i>	<i>tigris</i>	K.S. Norris	9/18/1965	Granite Mts., Trap-Willow Spr. 3B
62419	<i>Cnemidophorus</i>	<i>tigris</i>	K.S. Norris	9/18/1965	Granite Mts., Trap-Willow Spr. 4A
62421	<i>Cnemidophorus</i>	<i>tigris</i>	K.S. Norris	9/18/1965	Granite Mts., Trap-Willow Spr. 5B
MVZ 172965	<i>Cnemidophorus</i>	<i>tigris</i>	J.V.M. , C. Markmann	6/3/1978	Ivanpah Spr.
CAS 174458	<i>Cnemidophorus</i>	<i>tigris</i>	J.P. O'Brien	6/4/1988	Kelbaker Rd, 3 - 11 mi S Baker
CAS 174459	<i>Cnemidophorus</i>	<i>tigris</i>	J.P. O'Brien	6/4/1988	Kelbaker Rd, 3 - 11 mi S Baker
CAS 178158	<i>Cnemidophorus</i>	<i>tigris</i>	J.P. O'Brien	6/4/1988	Kelbaker Rd, 3-11 mi S of Baker
CAS 179081	<i>Cnemidophorus</i>	<i>tigris</i>	J.V. Vindum	6/12/1987	Kelbaker Rd, summit between Baker and Kelso
MVZ 39234	<i>Cnemidophorus</i>	<i>tigris</i>	Harvey I. Fisher	6/22/1940	Kelso
122453	<i>Cnemidophorus</i>	<i>tigris</i>	LA Lester & TC Olmstead	4/22/1976	Kelso Dunes; 9.2 mi. S, 5.1 mi. W. Kelso T 9N, R 12E, Sec 8 SE 1/4
122454	<i>Cnemidophorus</i>	<i>tigris</i>	LA Lester & TC Olmstead	4/22/1976	Kelso Dunes; 9.2 mi. S, 5.1 mi. W. Kelso
MVZ 26613	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/9/1938	Mitchell's Caverns, Providence Mts.
MVZ 26614	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/10/1938	Mitchell's Caverns, Providence Mts.
MVZ 26615	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/10/1938	Mitchell's Caverns, Providence Mts.
MVZ 26616	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/10/1938	Mitchell's Caverns, Providence Mts.
MVZ 26617	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/10/1938	Mitchell's Caverns, Providence Mts.
YPM 13342	<i>Cnemidophorus</i>	<i>tigris</i>	Jacques A. Gauthier	5/20/2001	N35.286000 W115.529000
MVZ 207848	<i>Cnemidophorus</i>	<i>tigris</i>	B. R. Moon	4/12/1987	mouth Globe Cyn, Providence Mts.
MVZ 28535	<i>Cnemidophorus</i>	<i>tigris</i>	Aldo S. Leopold	5/24/1939	N side Clark Mt.
MVZ 28536	<i>Cnemidophorus</i>	<i>tigris</i>	Aldo S. Leopold	5/24/1939	N side Clark Mt.
MVZ 28537	<i>Cnemidophorus</i>	<i>tigris</i>	Aldo S. Leopold	5/24/1939	N side Clark Mt.
MVZ 28538	<i>Cnemidophorus</i>	<i>tigris</i>	Aldo S. Leopold	5/25/1939	N side Clark Mt.
MVZ 28539	<i>Cnemidophorus</i>	<i>tigris</i>	Ronald W. Smith	5/26/1939	N side Clark Mt.
MVZ 28540	<i>Cnemidophorus</i>	<i>tigris</i>	Ronald W. Smith	5/26/1939	N side Clark Mt.
MVZ 28541	<i>Cnemidophorus</i>	<i>tigris</i>	Ward C. Russell	5/27/1939	N side Clark Mt.
MVZ 28542	<i>Cnemidophorus</i>	<i>tigris</i>	Ward C. Russell	5/27/1939	N side Clark Mt.
MVZ 28543	<i>Cnemidophorus</i>	<i>tigris</i>	Monroe D. Bryant	5/25/1939	N side Clark Mt.
MVZ 28544	<i>Cnemidophorus</i>	<i>tigris</i>	Monroe D. Bryant	5/25/1939	N side Clark Mt.
MVZ 28545	<i>Cnemidophorus</i>	<i>tigris</i>	Monroe D. Bryant	5/27/1939	N side Clark Mt.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 28546	<i>Cnemidophorus</i>	<i>tigris</i>	Alden H. Miller	5/25/1939	N side Clark Mt.
MVZ 28547	<i>Cnemidophorus</i>	<i>tigris</i>	Alden H. Miller	5/24/1939	N side Clark Mt.
YPM 13343	<i>Cnemidophorus</i>	<i>tigris</i>	Jacques A. Gauthier	5/20/2001	N35.286000 W115.529000
UCR-GMR 6	<i>Cnemidophorus</i>	<i>tigris</i>	Luke, C.	5/31/1998	Norris Camp, Sweeney Granite Mountains Desert Research Center, on dirt road between gate and cabin
MVZ 28326	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers, R. R. Miller	4/8/1939	NW side Soda Lake
122451	<i>Cnemidophorus</i>	<i>tigris</i>	LA Lester & TC Olmstead	4/29/1976	Old Dad Mtn; 4.3 mi. N, 11.3 mi. W. Kelso T 12N, R 11E, Sec 31 SW 1/4
MVZ 28515	<i>Cnemidophorus</i>	<i>tigris</i>	Aldo S. Leopold	5/31/1939	Pachalka Spr., Clark Mt.
MVZ 28516	<i>Cnemidophorus</i>	<i>tigris</i>	Aldo S. Leopold	5/31/1939	Pachalka Spr., Clark Mt.
MVZ 28517	<i>Cnemidophorus</i>	<i>tigris</i>	Ronald W. Smith	6/1/1939	Pachalka Spr., Clark Mt.
MVZ 26621	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/11/1938	Pass betw Granite & Providence Mts.
MVZ 26622	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/11/1938	Pass betw Granite & Providence Mts.
MVZ 26623	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/11/1938	Pass betw Granite & Providence Mts.
MVZ 26624	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/11/1938	Pass betw Granite & Providence Mts.
MVZ 26625	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/11/1938	Pass betw Granite & Providence Mts.
MVZ 26626	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/11/1938	Pass betw Granite & Providence Mts.
MVZ 26627	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/11/1938	Pass betw Granite & Providence Mts.
MVZ 26628	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	6/11/1938	Pass betw Granite & Providence Mts.
MVZ 26629	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers (#)	6/11/1938	Pass betw Granite & Providence Mts.
MVZ 35876	<i>Cnemidophorus</i>	<i>tigris</i>	Harvey I. Fisher	6/25/1940	Pass betw Granite & Providence Mts.
UCR-GMR 5	<i>Cnemidophorus</i>	<i>tigris</i>	-	4/10/1987	Pinyon Camp, Granite Cove, Sweeney Granite Mountain Desert Research Center
67325	<i>Cnemidophorus</i>	<i>tigris</i>	R.G. Crippen	5/31/1970	Rock Spr., 9.5 mi E, 5.5 mi S Cima
MVZ 26583	<i>Cnemidophorus</i>	<i>tigris</i>	Thomas L. Rodgers	5/30/1938	Rock Spr., Providence Mts.
MVZ 28518	<i>Cnemidophorus</i>	<i>tigris</i>	Ward C. Russell	5/19/1939	SE side Clark Mt.
MVZ 28519	<i>Cnemidophorus</i>	<i>tigris</i>	Ward C. Russell	5/19/1939	SE side Clark Mt.
MVZ 28520	<i>Cnemidophorus</i>	<i>tigris</i>	Ward C. Russell	5/19/1939	SE side Clark Mt.
MVZ 28521	<i>Cnemidophorus</i>	<i>tigris</i>	Ward C. Russell	5/19/1939	SE side Clark Mt.
MVZ 28522	<i>Cnemidophorus</i>	<i>tigris</i>	Ward C. Russell	5/20/1939	SE side Clark Mt.
MVZ 28523	<i>Cnemidophorus</i>	<i>tigris</i>	Ward C. Russell	5/21/1939	SE side Clark Mt.
MVZ 28524	<i>Cnemidophorus</i>	<i>tigris</i>	Ward C. Russell	5/21/1939	SE side Clark Mt.
MVZ 28525	<i>Cnemidophorus</i>	<i>tigris</i>	Ward C. Russell	5/21/1939	SE side Clark Mt.
MVZ 28526	<i>Cnemidophorus</i>	<i>tigris</i>	Ward C. Russell	5/21/1939	SE side Clark Mt.
MVZ 28527	<i>Cnemidophorus</i>	<i>tigris</i>	Alden H. Miller	5/18/1939	SE side Clark Mt.
MVZ 28528	<i>Cnemidophorus</i>	<i>tigris</i>	Alden H. Miller	5/18/1939	SE side Clark Mt.
MVZ 28529	<i>Cnemidophorus</i>	<i>tigris</i>	Alden H. Miller	5/18/1939	SE side Clark Mt.
MVZ 28530	<i>Cnemidophorus</i>	<i>tigris</i>	Alden H. Miller	5/21/1939	SE side Clark Mt.
MVZ 28531	<i>Cnemidophorus</i>	<i>tigris</i>	Alden H. Miller	5/22/1939	SE side Clark Mt.
MVZ 28532	<i>Cnemidophorus</i>	<i>tigris</i>	Alden H. Miller	5/22/1939	SE side Clark Mt.
MVZ 28533	<i>Cnemidophorus</i>	<i>tigris</i>	Aldo S. Leopold	5/19/1939	SE side Clark Mt.
MVZ 28534	<i>Cnemidophorus</i>	<i>tigris</i>	Aldo S. Leopold	5/19/1939	SE side Clark Mt.
122450	<i>Cnemidophorus</i>	<i>tigris</i>	LA Lester & TC Olmstead	4/24/1976	Upper Cottonwood Wash; 14.1 mi. S, 1 mi. W. Kelso T 9N, R 12E, Sec 1 SW 1/4
MVZ 146255	<i>Cnemidophorus</i>	<i>tigris</i>	E. Wessman	5/12/1976	W Ivanpah Valley
137867	<i>Cnemidophorus</i>	<i>tigris</i>	LC Jones	5/1/1977	Zzyzx Mineral Springs Field Station
MVZ 172795	<i>Coleonyx</i>	<i>variegatus</i>	J.V.M.	7/7/1978	1.5 mi E Ivanpah Spr.
52627	<i>Coleonyx</i>	<i>variegatus</i>	Welbourn	4/30/1967	19 mi. NNW of Essex
52628	<i>Coleonyx</i>	<i>variegatus</i>	Welbourn	4/30/1967	19 mi. NNW of Essex
MVZ 187472	<i>Coleonyx</i>	<i>variegatus</i>	E. K. Teberg , J. Gumm	5/30/1966	30 mi NE Essex, Mitchell Caverns St. Park Rd. off U.S. 66
MVZ 187473	<i>Coleonyx</i>	<i>variegatus</i>	E. K. Teberg, J. Gumm	5/30/1966	30 mi NE Essex, Mitchell Caverns St. Park Rd. off U.S. 66
MVZ 208186	<i>Coleonyx</i>	<i>variegatus</i>	B. R. Moon	4/6/1987	ca. 0.2 mi S of Kelso

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 207883	<i>Coleonyx</i>	<i>variegatus</i>	B. R. Moon	4/26/1987	Essex Rd., 10 mi N Hwy. 40, Providence Mts.
MVZ 172794	<i>Coleonyx</i>	<i>variegatus</i>	B. M. McGuerty	6/19/1977	Foshay Pass
UCR-GMR 13	<i>Coleonyx</i>	<i>variegatus</i>	Minden, R. L.	4/29/1978	Granite Mountains, 1/2 mile north of Coyote Springs T. 9N R. 12E Sect. 24
MVZ 172796	<i>Coleonyx</i>	<i>variegatus</i>	J.V.M.	9/12/1978	Ivanpah Spr.
CAS 183133	<i>Coleonyx</i>	<i>variegatus</i>	R. Macey	27 May-2 Jun 1991	Kelbaker Rd, 1.2-3.4 mi ESE of Hwy 15 at Baker
CAS 183148	<i>Coleonyx</i>	<i>variegatus</i>	R. Macey	27 May-2 June 1991	Kelbaker Rd, 1.2-3.4 mi ESE of Hwy 15 at Baker
CAS 162497	<i>Coleonyx</i>	<i>variegatus</i>	W. Savary	4/16/1987	Kelbaker Rd, betw. Baker and Kelso
MVZ 207884	<i>Coleonyx</i>	<i>variegatus</i>	B. R. Moon	5/29/1987	Kelbaker Rd., 2.5 mi S Kelso
52629	<i>Coleonyx</i>	<i>variegatus</i>	Knox	4/12/1959	Kelso Dunes
YPM 10368	<i>Coleonyx</i>	<i>variegatus</i>	Marc Gauthier	5/21/2001	Mojave Desert National Preserve
MVZ 172797	<i>Coleonyx</i>	<i>variegatus</i>	B. M. McGuerty	6/5/1977	Piute Cr.
MVZ 172798	<i>Coleonyx</i>	<i>variegatus</i>	B. M. McGuerty	6/5/1977	Piute Cr.
MVZ 172799	<i>Coleonyx</i>	<i>variegatus</i>	B. M. McGuerty	6/5/1977	Piute Cr.
MVZ 172800	<i>Coleonyx</i>	<i>variegatus</i>	B. M. McGuerty	6/5/1977	Piute Cr.
MVZ 172801	<i>Coleonyx</i>	<i>variegatus</i>	B. M. McGuerty	6/5/1977	Piute Cr.
MVZ 207885	<i>Coleonyx</i>	<i>variegatus</i>	B. R. Moon	6/13/1987	Vulcan Mine Rd., 3.5 mi SE Kelbaker Rd., Providence Mts.
MVZ 193519	<i>Crotalus</i>	<i>cerastes</i>	Harry W. Greene	9/11/1983	0.7 mi N Kelso RR Crossing, on Kelbaker Rd.
CAS 192591	<i>Crotalus</i>	<i>cerastes</i>	D.L. Martin	3/28/1988	1 mi SE of Baker
104783	<i>Crotalus</i>	<i>cerastes</i>	JC Geest	3/27/1960	1 mi. S. Klso
104782	<i>Crotalus</i>	<i>cerastes</i>	JC Geest	3/26/1960	12.7 mi. from Kelso
MVZ 193534	<i>Crotalus</i>	<i>cerastes</i>	Harry W. Greene	6/17/1983	19.5 mi N I-40 on Kelbaker Rd.
126241	<i>Crotalus</i>	<i>cerastes</i>	R.L. Bezy, LA Lester, W Haoocke	7/1/1977	2.5 mi. (by RR rd) WSW Kelso
MVZ 39633	<i>Crotalus</i>	<i>cerastes</i>	N. N. & E. Kozloff	7/3/1938	3 mi SW Kelso
140779	<i>Crotalus</i>	<i>cerastes</i>	Stephen Secor	9/16/1991	3.5 km S Kelso
140780	<i>Crotalus</i>	<i>cerastes</i>	Stephen Secor	9/16/1991	3.5 km S Kelso
140781	<i>Crotalus</i>	<i>cerastes</i>	Stephen Secor	9/16/1991	3.5 km S Kelso
140782	<i>Crotalus</i>	<i>cerastes</i>	Stephen Secor	10/17/1990	3.5 km S Kelso
140783	<i>Crotalus</i>	<i>cerastes</i>	Stephen Secor	9/15/1991	3.5 km S Kelso
MVZ 173552	<i>Crotalus</i>	<i>cerastes</i>	Stephen D. Busack, Fabian M. Jaksic	5/7/1980	4 mi SE Mitchell Caverns on Essex Rd.
MVZ 173055	<i>Crotalus</i>	<i>cerastes</i>	C. Markmann , J.V.M.	5/26/1978	5.5 mi N Interstate 15
MVZ 28571	<i>Crotalus</i>	<i>cerastes</i>	Aldo S. Leopold	5/26/1939	8 mi W Clark Mt.
MVZ 173054	<i>Crotalus</i>	<i>cerastes</i>	C. Markmann, J.V.M.	5/10/1978	Cima Rd., 7 mi N Interstate 15
UCR-GMR 27	<i>Crotalus</i>	<i>cerastes</i>	Minden, R. L.	4/29/1978	Granite Mountains, approx 2 miles SW of Willow Spring Basin T. 8N R. 12E Sect. 34
UCR-GMR 28	<i>Crotalus</i>	<i>cerastes</i>	Secor, Stephen	5/19/1989	Kelbaker Rd. and Vulcan Mine Rd., 3 miles SE of Kelso, CA
MVZ 173057	<i>Crotalus</i>	<i>mitchellii</i>	C. Markmann, J.V.M.	8/12/1978	1 mi W Green Well
MVZ 41700	<i>Crotalus</i>	<i>mitchellii</i>	Ward C. Russell	10/6/1945	14 mi NW Essex
MVZ 26660	<i>Crotalus</i>	<i>mitchellii</i>	Thomas L. Rodgers Elmer C. Aldrich	5/24/1938	Cedar Canyon, Providence Mts.
MVZ 26661	<i>Crotalus</i>	<i>mitchellii</i>	David H. Johnson	5/28/1938	Cedar Canyon, Providence Mts.
MVZ 26662	<i>Crotalus</i>	<i>mitchellii</i>	Thomas L. Rodgers	6/3/1938	Cedar Canyon, Providence Mts.
MVZ 26663	<i>Crotalus</i>	<i>mitchellii</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 207933	<i>Crotalus</i>	<i>mitchellii</i>	B. R. Moon	4/10/1987	Dorners Camp Rd., 0.25 mi W of Kelbaker Rd., Granite Mts.
UCR-GMR 76	<i>Crotalus</i>	<i>mitchellii</i>	Coupe, B.	6/12/2001	Granite Cove, on road between Allanson Center and Staples House N 34°46'58.8" W 115°39'23.4"
UCR-GMR 35	<i>Crotalus</i>	<i>mitchellii</i>	Minden, R. L.	5/9/1978	Granite Mountains, Willow Spring Basin Wash T. 8N R. 12E Sect. 23

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
23246	<i>Crotalus</i>	<i>mitchellii</i>	Campbell	8/12/1963	Granite Mtns.
MVZ 173058	<i>Crotalus</i>	<i>mitchellii</i>	C. Markmann, J.V.M.	6/2/1978	Ivanpah Spr.
MVZ 207934	<i>Crotalus</i>	<i>mitchellii</i>	B. R. Moon	4/22/1987	Kelbaker Rd., 2.5 mi N of Kelso
MVZ 207935	<i>Crotalus</i>	<i>mitchellii</i>	B. R. Moon	4/28/1987	Main Fork of Bonanza King Canyon, Providence Mts.
SDNHM Z16714	<i>Crotalus</i>	<i>mitchellii</i>	Huey, L. M.	4/7/1935	Providence Mountains, Gilroy Canyon
138219	<i>Crotalus</i>	<i>mitchellii</i>	S Werman	4/30/1977	Providence Mts, Vulcan Mine Rd., 2.5 miles from jctn w/ Kelbaker Rd
138218	<i>Crotalus</i>	<i>mitchellii</i>	LC Jones	4/30/1977	Providence Mts. Vulcan Mine Rd., 3.2 miles from jctn Kelbaker Rd
SDNHM Z29655	<i>Crotalus</i>	<i>mitchellii</i>	Rodgers, Tom	6/2/1938	Providence Mts., Cedar Canyon
SDNHM Z29654	<i>Crotalus</i>	<i>mitchellii</i>	Rodgers, Tom	6/9/1938	Providence Mts., Mitchell's Caverns
UCR-GMR 34	<i>Crotalus</i>	<i>mitchellii</i>	Luke, C.	5/5/1995	Sweeney Granite Mtns Desert Res. Ctr, 400 ft W Allanson Center
MVZ 206942	<i>Crotalus</i>	<i>mitchellii</i>	B. R. Moon	5/29/1987	Vulcan Mine area, Providence Mts.
126218	<i>Crotalus</i>	<i>scutulatus</i>	W.D. Haache, L.A. Lester, and R.L Bezzy	7/1/1977	0.5 mi ( by rd ) S. Cima
MVZ 193465	<i>Crotalus</i>	<i>scutulatus</i>	Harry W. Greene	9/10/1983	1.1 mi S Kelso Dunes Rd. on Kelbaker Rd.
MVZ 173554	<i>Crotalus</i>	<i>scutulatus</i>	Stephen D. Busack , Fabian M. Jaksic	5/7/1980	14 mi NW Essex on Essex Rd.
138226	<i>Crotalus</i>	<i>scutulatus</i>	RB Loomis	6/2/1977	19 miles SE Baker on Kelbaker Rd
MVZ 26664	<i>Crotalus</i>	<i>scutulatus</i>	Elmer C. Aldrich	5/17/1938	2 mi NNE Cima
MVZ 26667	<i>Crotalus</i>	<i>scutulatus</i>	Thomas L. Rodgers	6/1/1938	3 mi SE Cima, Providence Mts.
UCR-GMR 220	<i>Crotalus</i>	<i>scutulatus</i>	Sexton, J.	9/14/2002	4.7 miles N Granite Pass on Kelbaker Road
MVZ 173553	<i>Crotalus</i>	<i>scutulatus</i>	Stephen D. Busack , Fabian M. Jaksic	5/7/1980	5 mi [Rd.] SE Mitchell Caverns on Essex Rd.
36592	<i>Crotalus</i>	<i>scutulatus</i>	Lester & Northern	5/26/1967	5 mi S, 6 mi E Cima
105087	<i>Crotalus</i>	<i>scutulatus</i>	R Hardy	4/1/1960	ca. 17 mi S kelso nr. Granite Mtns.
MVZ 26665	<i>Crotalus</i>	<i>scutulatus</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 173059	<i>Crotalus</i>	<i>scutulatus</i>	C. Markmann, J.V.M.	5/12/1978	Cima Rd., 2 mi N Interstate 15
MVZ 173060	<i>Crotalus</i>	<i>scutulatus</i>	C. Markmann, J.V.M.	6/16/1978	Cima Rd., 4.5 mi N Interstate 15
SDNHM Z29656	<i>Crotalus</i>	<i>scutulatus</i>	Rodgers, Tom	5/14/1938	Cima, 2 mi. NE. of
UCR-GMR 31	<i>Crotalus</i>	<i>scutulatus</i>	Minden, R. L.	4/23/1978	Granite Mountains, Kelbaker Rd. S Willow Springs
MVZ 193464	<i>Crotalus</i>	<i>scutulatus</i>	Harry W. Greene, Jonathan H. Carothers	10/3/1983	jct. Kelbaker Rd. and I-40
UCR-GMR 75	<i>Crotalus</i>	<i>scutulatus</i>	Coupe, B.	3/29/2001	Kelbaker Rd. N 34 53' 11.8" W 115 38' 58.7"
UCR-GMR 33	<i>Crotalus</i>	<i>scutulatus</i>	Luke, C.	5/20/1995	Kelbaker Rd., 1 mile N of Granite Pass
UCR-GMR 32	<i>Crotalus</i>	<i>scutulatus</i>	Secor, Stephen	4/15/1989	Kelbaker Rd., 10 miles SW of Kelso R 13E T. 9N Sect. 20
MVZ 207936	<i>Crotalus</i>	<i>scutulatus</i>	B. R. Moon	4/8/1987	Kelbaker Rd., 4.1 mi N of Hwy. 40
MVZ 207938	<i>Crotalus</i>	<i>scutulatus</i>	B. R. Moon	4/24/1987	Kelbaker Rd., 5 mi S of Hwy. 40
UCR-GMR 30	<i>Crotalus</i>	<i>scutulatus</i>	Secor, Stephen and Sallee, Kevin	8/10/1989	Kelbaker Rd., 8 Miles SE of Kelso, CA
MVZ 207937	<i>Crotalus</i>	<i>scutulatus</i>	B. R. Moon	4/10/1987	Kelbaker Rd., 9.2 mi N of Hwy. 40
UCR-GMR 29	<i>Crotalus</i>	<i>scutulatus</i>	Secor, Stephen	5/5/1989	Kelbaker Rd., 9.5 miles SW of Kelso, CA
UCR-GMR 224	<i>Crotalus</i>	<i>scutulatus</i>	Coupe, B. & Alsbach, L.	5/8/2003	Kelbaker Rd., XX miles X of Kelso Dunes turn off. 623663E 3867046N
122459	<i>Crotalus</i>	<i>scutulatus</i>	LA Lester & TC Olmstead	4/21/1976	near Granite Pass; 11 mi. S. Kelso T 9N, R 13E, Sec 19 SW 1/4
20046	<i>Crotalus</i>	<i>scutulatus</i>	Geiger	2/6/1937	New York Mts.
MVZ 193461	<i>Crotalus</i>	<i>scutulatus</i>	Harry W. Greene	5/7/1983	Rd. on S side of Kelso Dunes
MVZ 207852	<i>Crotaphytus</i>	<i>bicinctores</i>	B. R. Moon	5/5/1987	0.25 mi SE Vulcan Mine, Providence Mts.
MVZ 172824	<i>Crotaphytus</i>	<i>bicinctores</i>	J.V.M.	7/23/1978	1 mi W Green's Well
MVZ 215584	<i>Crotaphytus</i>	<i>bicinctores</i>	Harry W. Greene	5/20/1987	1.3 mi W Vulcan Mine, Providence Mts.
MVZ 172826	<i>Crotaphytus</i>	<i>bicinctores</i>	J.V.M.	7/8/1978	2.0 mi W Green's Well
MVZ 172825	<i>Crotaphytus</i>	<i>bicinctores</i>	J.V.M.	7/8/1978	2.5 mi NW Green's Well

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 26297	<i>Crotaphytus</i>	<i>bicinctores</i>	M. D. Arvey	5/15/1938	5 mi SW Ivanpah
BM R-2285	<i>Crotaphytus</i>	<i>bicinctores</i>	J.H. Wray	4/25/1965	9.7 mi W of Nipton
MVZ 207849	<i>Crotaphytus</i>	<i>bicinctores</i>	B. R. Moon	4/6/1987	ca. 0.75 mi NW of Cornfield Spring, Providence Mts.
MVZ 26298	<i>Crotaphytus</i>	<i>bicinctores</i>	David H. Johnson	5/23/1938	Cedar Canyon, Providence Mts.
MVZ 26299	<i>Crotaphytus</i>	<i>bicinctores</i>	Thomas L. Rodgers	5/24/1938	Cedar Canyon, Providence Mts.
MVZ 26300	<i>Crotaphytus</i>	<i>bicinctores</i>	Thomas L. Rodgers	5/24/1938	Cedar Canyon, Providence Mts.
MVZ 26301	<i>Crotaphytus</i>	<i>bicinctores</i>	Thomas L. Rodgers	5/25/1938	Cedar Canyon, Providence Mts.
MVZ 26302	<i>Crotaphytus</i>	<i>bicinctores</i>	Thomas L. Rodgers	5/25/1938	Cedar Canyon, Providence Mts.
MVZ 26303	<i>Crotaphytus</i>	<i>bicinctores</i>	David H. Johnson	5/25/1938	Cedar Canyon, Providence Mts.
MVZ 26304	<i>Crotaphytus</i>	<i>bicinctores</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26305	<i>Crotaphytus</i>	<i>bicinctores</i>	Thomas L. Rodgers	5/29/1938	Cedar Canyon, Providence Mts.
MVZ 26306	<i>Crotaphytus</i>	<i>bicinctores</i>	Thomas L. Rodgers	5/30/1938	Cedar Canyon, Providence Mts.
MVZ 172823	<i>Crotaphytus</i>	<i>bicinctores</i>	J.V.M.	6/17/1978	Colosseum Gorge
23245	<i>Crotaphytus</i>	<i>bicinctores</i>	Porter	5/15/1965	Granite Mtns.
CAS 174456	<i>Crotaphytus</i>	<i>bicinctores</i>	J.P. O'Brien	6/4/1988	Kelbaker Rd, 3 - 11 mi S Baker
CAS 174456	<i>Crotaphytus</i>	<i>bicinctores</i>	J.P. O'Brien	6/4/1988	Kelbaker Rd, 3 - 11 mi S Baker
94644	<i>Crotaphytus</i>	<i>bicinctores</i>	RC Stephens	4/12/1970	Lanfair Valley, vic. Hackberry Mtn, approx. 20 mi NW cutoffs
MVZ 26307	<i>Crotaphytus</i>	<i>bicinctores</i>	Thomas L. Rodgers	6/10/1938	Mitchell's Caverns, Providence Mts.
MVZ 35637	<i>Crotaphytus</i>	<i>bicinctores</i>	David H. Johnson	6/26/1940	Mitchell's Caverns, Providence Mts.
MVZ 207850	<i>Crotaphytus</i>	<i>bicinctores</i>	B. R. Moon	4/20/1987	Pipeline Rd., ca. 0.25 mi W of Foshay Pass, Providence Mts.
MVZ 207851	<i>Crotaphytus</i>	<i>bicinctores</i>	B. R. Moon	4/20/1987	Pipeline Rd., ca. 0.25 mi W of Foshay Pass, Providence Mts.
MVZ 172827	<i>Crotaphytus</i>	<i>bicinctores</i>	B. M. McGurty	6/5/1977	Piute Cr.
MVZ 172828	<i>Crotaphytus</i>	<i>bicinctores</i>	B. M. McGurty	6/5/1977	Piute Cr.
137888	<i>Crotaphytus</i>	<i>bicinctores</i>	RB Loomis	6/3/1977	Providence Mts, 5.2 mi SE Kelbaker Rd on Vulcan Mine Rd
MVZ 28420	<i>Crotaphytus</i>	<i>bicinctores</i>	Ward C. Russell	5/19/1939	SE side Clark Mt.
137890	<i>Crotaphytus</i>	<i>bicinctores</i>		5/1/1977	Soda Springs, Zzyzx Mineral Springs, nr main gate
137889	<i>Crotaphytus</i>	<i>bicinctores</i>	LC Jones	5/1/1977	Zzyzx Rd, 1.4 mi N Zzyzx Mineral Springs
UCR-GMR 19	<i>Crotaphytus</i>	<i>insularis</i>	Minden, R. L.	4/26/1978	Granite Mtns, 1/4 mi. E Playground Wash T. 9N R. 12E Sect. 23
UAZ 24130	<i>Diadophis</i>	<i>punctatus</i>	C.H. Lowe, G.G. Parker	May 1950	Mitchell's Caverns, Providence Mts.
SDNHM Z53151	<i>Diadophis</i>	<i>punctatus</i>	Shields, Oakley	4/13/1963	Providence Mountains Canyon NNW. of Mitchell Caverns State Park
137895	<i>Dipsosaurus</i>	<i>dorsalis</i>		5/14/1978	13.9 mi S Baker at Chuckwalla site
MVZ 35624	<i>Dipsosaurus</i>	<i>dorsalis</i>	Harvey I. Fisher	6/19/1940	2.5 mi SW Kelso
MVZ 35625	<i>Dipsosaurus</i>	<i>dorsalis</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35626	<i>Dipsosaurus</i>	<i>dorsalis</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35627	<i>Dipsosaurus</i>	<i>dorsalis</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35628	<i>Dipsosaurus</i>	<i>dorsalis</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35629	<i>Dipsosaurus</i>	<i>dorsalis</i>	Milton Hildebrand	6/20/1940	2.5 mi SW Kelso
MVZ 35630	<i>Dipsosaurus</i>	<i>dorsalis</i>	Milton Hildebrand	6/20/1940	2.5 mi SW Kelso
MVZ 39224	<i>Dipsosaurus</i>	<i>dorsalis</i>	Harvey I. Fisher	6/21/1940	2.5 mi SW Kelso
MVZ 39225	<i>Dipsosaurus</i>	<i>dorsalis</i>	Harvey I. Fisher	6/21/1940	2.5 mi SW Kelso
MVZ 39226	<i>Dipsosaurus</i>	<i>dorsalis</i>	Harvey I. Fisher	6/21/1940	2.5 mi SW Kelso
MVZ 26294	<i>Dipsosaurus</i>	<i>dorsalis</i>	Thomas L. Rodgers	6/10/1938	8.5 mi NW Essex
UCR-GMR 24	<i>Dipsosaurus</i>	<i>dorsalis</i>	Minden, R. L.	4/22/1978	Granite Mountains, Carr Wash T. 9N R. 12E Sect. 25
CAS 174457	<i>Dipsosaurus</i>	<i>dorsalis</i>	J.P. O'Brien	6/4/1988	Kelbaker Rd, 3-11 mi S Baker
MVZ 35631	<i>Dipsosaurus</i>	<i>dorsalis</i>	Harvey I. Fisher	6/22/1940	Kelso
MVZ 172836	<i>Dipsosaurus</i>	<i>dorsalis</i>	B. M. McGurty	6/19/1977	Kelso Dunes
122425	<i>Dipsosaurus</i>	<i>dorsalis</i>	LA Lester & TC Olmstead	4/29/1976	Old Dad Mtn; 3.7 mi. N, 12.3 mi. W. Kelso T 12N, R 11E, Sec 31, SW 1/4

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
137894	<i>Dipsosaurus</i>	<i>dorsalis</i>	J Kemper, K Vascooy	5/13/1978	Soda Dry Lake (Zzyzx)
137893	<i>Dipsosaurus</i>	<i>dorsalis</i>	S Werman	4/30/1977	south side, Kelso Dunes, 3 mi W of Kelbaker Rd
MVZ 146242	<i>Dipsosaurus</i>	<i>dorsalis</i>	E. Wessman	5/12/1976	W Ivanpah Valley
UCR-GMR 14	<i>Eumeces</i>	<i>gilberti</i>	Minden, R. L.	4/2/1978	T. 8N R. 12E Sect. 22 N.E. 1/4
MVZ 207887	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	4/5/1987	0.125 mi SW Goldstone Spring, Providence Mts.
MVZ 207886	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	4/5/1987	0.25 mi SW Foshay Pass, Providence Mts.
MVZ 172946	<i>Eumeces</i>	<i>gilberti</i>	C. Markmann, J.V.M.	9/1/1978	1 mi W Green's Well
MVZ 207898	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	6/16/1987	2 Canyons W Blind Spring, Providence Mts.
MVZ 207899	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	6/16/1987	2 Canyons W Blind Spring, Providence Mts.
MVZ 207900	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	6/16/1987	2 Canyons W Blind Spring, Providence Mts.
MVZ 26937	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	6/5/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 172947	<i>Eumeces</i>	<i>gilberti</i>	C. Markmann, J.V.M.	7/28/1978	2 mi W Green's Well
MVZ 26635	<i>Eumeces</i>	<i>gilberti</i>	M. D. Arvey	5/22/1938	Cedar Canyon, Providence Mts.
MVZ 26636	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26637	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26638	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26639	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	5/29/1938	Cedar Canyon, Providence Mts.
MVZ 26640	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	5/30/1938	Cedar Canyon, Providence Mts.
MVZ 26641	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	5/31/1938	Cedar Canyon, Providence Mts.
MVZ 26642	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	6/1/1938	Cedar Canyon, Providence Mts.
MVZ 26643	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	6/2/1938	Cedar Canyon, Providence Mts.
MVZ 26644	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	6/3/1938	Cedar Canyon, Providence Mts.
MVZ 26645	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	6/3/1938	Cedar Canyon, Providence Mts.
MVZ 26646	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	6/3/1938	Cedar Canyon, Providence Mts.
MVZ 26935	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	6/1/1938	Cedar Canyon, Providence Mts.
MVZ 26936	<i>Eumeces</i>	<i>gilberti</i>	Thomas L. Rodgers	6/3/1938	Cedar Canyon, Providence Mts.
14934	<i>Eumeces</i>	<i>gilberti</i>	Norris and Zweifel	4/26/1950	Clark Mountains: Pachalka Springs
14935	<i>Eumeces</i>	<i>gilberti</i>	Norris and Zweifel	4/26/1950	Clark Mountains: Pachalka Springs
UCR-GMR 15	<i>Eumeces</i>	<i>gilberti</i>	-	4/21/1990	Dormer Camp
MVZ 207889	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	5/6/1987	Goldstone Spring, Providence Mts.
MVZ 207890	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	5/6/1987	Goldstone Spring, Providence Mts.
MVZ 207893	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	5/17/1987	Goldstone Spring, Providence Mts.
MVZ 207894	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	5/25/1987	Goldstone Spring, Providence Mts.
MVZ 207897	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	6/14/1987	Goldstone Spring, Providence Mts.
22692	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mountains
22714	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mountains
22722	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mountains
22723	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mountains
23254	<i>Eumeces</i>	<i>gilberti</i>	Porter	5/15/1965	Granite Mtns.
23255	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mtns.
23256	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/17/1965	Granite Mtns.
23257	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mtns.
23268	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mtns.
23269	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/17/1965	Granite Mtns.
23270	<i>Eumeces</i>	<i>gilberti</i>	Ahearu	4/24/1965	Granite Mtns.
23271	<i>Eumeces</i>	<i>gilberti</i>	Ahearu	4/24/1965	Granite Mtns.
23272	<i>Eumeces</i>	<i>gilberti</i>	Porter	5/15/1965	Granite Mtns.
23273	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mtns.
23274	<i>Eumeces</i>	<i>gilberti</i>	Porter	5/15/1965	Granite Mtns.
23275	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mtns.
23276	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mtns.
23277	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mtns.
23278	<i>Eumeces</i>	<i>gilberti</i>	Porter	5/15/1965	Granite Mtns.
23279	<i>Eumeces</i>	<i>gilberti</i>	Porter	5/15/1965	Granite Mtns.
23280	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mtns.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
23281	<i>Eumeces</i>	<i>gilberti</i>	Porter	5/15/1965	Granite Mtns.
23282	<i>Eumeces</i>	<i>gilberti</i>	Porter	5/15/1965	Granite Mtns.
23283	<i>Eumeces</i>	<i>gilberti</i>	Porter	5/15/1965	Granite Mtns.
23284	<i>Eumeces</i>	<i>gilberti</i>	Porter	5/15/1965	Granite Mtns.
23285	<i>Eumeces</i>	<i>gilberti</i>	Porter	5/15/1965	Granite Mtns.
22681	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mts.
22684	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mts.
22687	<i>Eumeces</i>	<i>gilberti</i>	Porter	6/12/1965	Granite Mts.
MVZ 206231	<i>Eumeces</i>	<i>gilberti</i>	A. D. Driscoll	4/22/1986	Granite Mts. Plateau, Granite Mts.
MVZ 206232	<i>Eumeces</i>	<i>gilberti</i>	A. D. Driscoll	5/5/1986	Granite Mts. Plateau, Granite Mts.
MVZ 206233	<i>Eumeces</i>	<i>gilberti</i>	A. D. Driscoll (#5)	5/10/1986	Granite Mts. Plateau, Granite Mts.
62410	<i>Eumeces</i>	<i>gilberti</i>	K.S. Norris	9/18/1965	Granite Mts., Granite 7A
62412	<i>Eumeces</i>	<i>gilberti</i>	K.S. Norris	9/18/1965	Granite Mts., Granite 7B
62413	<i>Eumeces</i>	<i>gilberti</i>	K.S. Norris	9/18/1965	Granite Mts., Granite 9B
62411	<i>Eumeces</i>	<i>gilberti</i>	K.S. Norris	9/18/1965	Granite Mts., Granite 9C
62409	<i>Eumeces</i>	<i>gilberti</i>	K.S. Norris	9/18/1965	Granite Mts., Trap-Cove Spr. 5B
MVZ 70545	<i>Eumeces</i>	<i>gilberti</i>	John M. Burns	4/21/1960	Keystone Canyon, New York Mts.
MVZ 207888	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	4/28/1987	mouth Bonanza King Canyon, Providence Mts.
MVZ 28354	<i>Eumeces</i>	<i>gilberti</i>	Ronald W. Smith	5/31/1939	Pachalka Spr., Clark Mt.
MVZ 28355	<i>Eumeces</i>	<i>gilberti</i>	Ward C. Russell	5/31/1939	Pachalka Spr., Clark Mt.
MVZ 28356	<i>Eumeces</i>	<i>gilberti</i>	Ward C. Russell	5/31/1939	Pachalka Spr., Clark Mt.
MVZ 28357	<i>Eumeces</i>	<i>gilberti</i>	Ward C. Russell	5/31/1939	Pachalka Spr., Clark Mt.
MVZ 28358	<i>Eumeces</i>	<i>gilberti</i>	Ward C. Russell	5/31/1939	Pachalka Spr., Clark Mt.
MVZ 28362	<i>Eumeces</i>	<i>gilberti</i>	Ronald W. Smith	5/31/1939	Pachalka Spr., Clark Mt.
MVZ 28353	<i>Eumeces</i>	<i>gilberti</i>	Ward C. Russell	5/21/1939	SE side Clark Mt.
MVZ 28359	<i>Eumeces</i>	<i>gilberti</i>	Ward C. Russell	5/19/1939	SE side Clark Mt.
MVZ 28360	<i>Eumeces</i>	<i>gilberti</i>	Ward C. Russell	5/18/1939	SE side Clark Mt.
MVZ 190546	<i>Eumeces</i>	<i>gilberti</i>	Stephen D. Busack, Harry W. Greene	5/6/1983	SE slope Granite Mts.
MVZ 207891	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	5/6/1987	Spring 0.25 mi E Goldstone Spring, Providence Mts.
MVZ 207892	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	5/6/1987	Spring 0.25 mi E Goldstone Spring, Providence Mts.
MVZ 207895	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	5/25/1987	Spring 0.25 mi SE Goldstone Spring, Providence Mts.
MVZ 207896	<i>Eumeces</i>	<i>gilberti</i>	B. R. Moon	5/25/1987	Spring 0.25 mi SE Goldstone Spring, Providence Mts.
122427	<i>Gambelia</i>	<i>wislizenii</i>	LA Lester & TC Olmstead	4/29/1976	12.2 mi. S, 14.3 mi. W Kelso T 9N, R 10E, Sec 34, NE 1/4
MVZ 26311	<i>Gambelia</i>	<i>wislizenii</i>	David H. Johnson	5/13/1938	2 mi E Cima
MVZ 26314	<i>Gambelia</i>	<i>wislizenii</i>	Thomas L. Rodgers	6/5/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 26308	<i>Gambelia</i>	<i>wislizenii</i>	M. D. Arvey	5/12/1938	2 mi NNE Cima
MVZ 26309	<i>Gambelia</i>	<i>wislizenii</i>	M. D. Arvey	5/12/1938	2 mi NNE Cima
MVZ 26310	<i>Gambelia</i>	<i>wislizenii</i>	Elmer C. Aldrich	5/13/1938	2 mi NNE Cima
MVZ 26312	<i>Gambelia</i>	<i>wislizenii</i>	David H. Johnson	5/14/1938	2 mi NNE Cima
MVZ 26313	<i>Gambelia</i>	<i>wislizenii</i>	David H. Johnson	5/14/1938	2 mi NNE Cima
MVZ 28426	<i>Gambelia</i>	<i>wislizenii</i>	Aldo S. Leopold	5/28/1939	8 mi W Clark Mt.
MVZ 26316	<i>Gambelia</i>	<i>wislizenii</i>	Thomas L. Rodgers (#	5/30/1938	Cedar Canyon, Providence Mts.
MVZ 26669	<i>Gambelia</i>	<i>wislizenii</i>	Thomas L. Rodgers	6/3/1938	Cedar Canyon, Providence Mts.
MVZ 172830	<i>Gambelia</i>	<i>wislizenii</i>	C. Markmann, J.V.M.	5/12/1978	Cima Rd., 6 mi N I-15
UCR-GMR 77	<i>Gambelia</i>	<i>wislizenii</i>	Coupe, B.	6/12/2001	Granite Cove, on road between Allanson Center and Staples House N 34°46'58.8" W 115°39'23.4"
UCR-GMR 1	<i>Gambelia</i>	<i>wislizenii</i>	Minden, R. L.	4/26/1978	Granite Mountains, Coyote Springs
4014	<i>Gambelia</i>	<i>wislizenii</i>	C.M. Dammors	4/6/1918	Granite Mt., S. of Providence Mts.
MVZ 172833	<i>Gambelia</i>	<i>wislizenii</i>	C. Markmann, J.V.M.	5/26/1978	Ivanpah Spr.
CAS 178157	<i>Gambelia</i>	<i>wislizenii</i>	J.P. O'Brien	6/4/1988	Kelbaker Rd, 3-11 mi S of Baker

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 207869	<i>Gambelia</i>	<i>wislizenii</i>	B. R. Moon	4/25/1987	Kelbaker Rd., ca. 5 mi S Kelso Dunes Rd.
126233	<i>Gambelia</i>	<i>wislizenii</i>	R.L. Bezy, JW Wright	7/1/1977	Kelso Dunes, 9.0 mi S., 3.0 mi W Kelso
126234	<i>Gambelia</i>	<i>wislizenii</i>	R.L. Bezy, JW Wright	7/1/1977	Kelso Dunes, 9.0 mi S., 3.0 mi W Kelso
UCR-GMR 223	<i>Gambelia</i>	<i>wislizenii</i>	Sexton, J.	4/29/2003	DOOR outside main gate at GMDRC
YPM 10367	<i>Gambelia</i>	<i>wislizenii</i>	Jacques A. Gauthier	5/20/2001	N35.185600 W115.503200
YPM 14380	<i>Gambelia</i>	<i>wislizenii</i>	Jacques A. Gauthier	5/22/2001	N35.185600 W115.503200
MVZ 28425	<i>Gambelia</i>	<i>wislizenii</i>	Ward C. Russell	5/27/1939	N side Clark Mt.
CAS 200848	<i>Gambelia</i>	<i>wislizenii</i>	J.A. Gauthier	6/20/1993	NE side of Granite Mtns, base of alluvial fan (adj. to UC Res. Station)
CAS 201500	<i>Gambelia</i>	<i>wislizenii</i>	J.A. Gauthier et al.	6/20/1993	NE side of Granite Mtns, base of alluvial fan (adj. to UC Res. Station)
CAS 200865	<i>Gambelia</i>	<i>wislizenii</i>	J.A. Gauthier	6/21/1993	NE side of Granite Mtns, base of alluvial fan (adj. to UC Res. Station)
122426	<i>Gambelia</i>	<i>wislizenii</i>	LA Lester & TC Olmstead	4/23/1976	near Granite Pass; 11 mi. W. Kelso T 9N, R 10E, Sec 19, SW 1/4
MVZ 26315	<i>Gambelia</i>	<i>wislizenii</i>	Thomas L. Rodgers	6/11/1938	Pass betw. Granite & Providence Mts.
SDNHM Z29660	<i>Gambelia</i>	<i>wislizenii</i>	Rodgers, Tom	6/11/1938	Pass betw. Granite & Providence Mts.
MVZ 28427	<i>Gambelia</i>	<i>wislizenii</i>	Aldo S. Leopold	5/20/1939	S side Clark Mt.
137897	<i>Gambelia</i>	<i>wislizenii</i>	RB Loomis	4/29/1977	Soda Springs (Zzyzx)
MVZ 35885	<i>Gopherus</i>	<i>agassizi</i>	Harvey I. Fisher	6/19/1940	2.5 mi SW Kelso
MVZ 35886	<i>Gopherus</i>	<i>agassizi</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35887	<i>Gopherus</i>	<i>agassizi</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 26668	<i>Gopherus</i>	<i>agassizi</i>	David H. Johnson	5/15/1938	5 mi SW Ivanpah
MVZ 50257	<i>Gopherus</i>	<i>agassizi</i>	Herbert Andrade	4/29/1905	5 mi SW Ivanpah
MVZ 25360	<i>Gopherus</i>	<i>agassizi</i>	David H. Johnson	1/12/1938	7 mi N Cima, Ivanpah Mts.
MVZ 209572	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	4/8/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209573	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	4/8/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209574	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	4/24/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209575	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	4/24/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209576	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	4/25/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209577	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	4/25/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209578	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	4/26/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209579	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	4/26/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209580	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	4/28/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209581	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	5/8/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209582	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	5/9/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209583	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	5/9/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209584	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	5/10/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209585	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	5/13/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209586	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	5/14/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209587	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	6/8/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209588	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	4/26/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 209589	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	6/9/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209590	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	6/10/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209591	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	6/9/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
MVZ 209592	<i>Gopherus</i>	<i>agassizi</i>	B. L. Burge	4/24/1977	Fenner Valley Site, ca. 4.5 mi N and 3.5 mi [Air] E Fenner
UCR-GMR 70	<i>Gopherus</i>	<i>agassizii</i>	-		-
BM R-665	<i>Heloderma</i>	<i>spectum</i>	Mr. Miller	5/20/1962	E flank of Clark Mtns.
MVZ 172782	<i>Hyla</i>	<i>regilla</i>	T. W. Brown	4/29/1978	1 mi N Soda Spr., Alkaline Marsh at edge of Soda Lake
MVZ 172767	<i>Hyla</i>	<i>regilla</i>	L. T. Findley , T. W. Brown	5/13/1978	Soda Dry Lake, W side LOT OF CA. 250 TADPOLES
MVZ 27876	<i>Hyla</i>	<i>regilla</i>	Thomas L. Rodgers, R. R. Miller , R. G. Miller	7/9/1937	Soda Station, W side Soda Lake
MVZ 28236	<i>Hyla</i>	<i>regilla</i>	Thomas L. Rodgers, R. R. Miller	4/8/1939	Soda Station, W side Soda Lake
MVZ 28237	<i>Hyla</i>	<i>regilla</i>	Thomas L. Rodgers, R. R. Miller	4/8/1939	Soda Station, W side Soda Lake
MVZ 28238	<i>Hyla</i>	<i>regilla</i>	Thomas L. Rodgers, R. R. Miller	4/8/1939	Soda Station, W side Soda Lake
MVZ 28239	<i>Hyla</i>	<i>regilla</i>	Thomas L. Rodgers, R. R. Miller	4/8/1939	Soda Station, W side Soda Lake
MVZ 28240	<i>Hyla</i>	<i>regilla</i>	Thomas L. Rodgers, R. R. Miller	4/8/1939	Soda Station, W side Soda Lak
MVZ 28241	<i>Hyla</i>	<i>regilla</i>	Thomas L. Rodgers, R. R. Miller	4/8/1939	Soda Station, W side Soda Lake
MVZ 27976	<i>Hyla</i>	<i>regilla</i>	Thomas L. Rodgers, R. R. Miller	5/21/1939	Soda Station
MVZ 172780	<i>Hyla</i>	<i>regilla</i>	L. T. Findley , T. W. Brown	5/13/1978	W side Soda Dry Lake
MVZ 172781	<i>Hyla</i>	<i>regilla</i>	L. T. Findley , T. W. Brown	5/13/1978	W side Soda Dry Lake
MVZ 173008	<i>Hypsiglena</i>	<i>torquata</i>	T. W. Brown	5/27/1978	1 mi S Soda Springs
MVZ 173009	<i>Hypsiglena</i>	<i>torquata</i>	T. W. Brown	5/27/1978	1 mi S Soda Springs
MVZ 173003	<i>Hypsiglena</i>	<i>torquata</i>	C. Markmann, J.V.M.	7/21/1977	2 mi W of Green's Well
MVZ 26659	<i>Hypsiglena</i>	<i>torquata</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 173002	<i>Hypsiglena</i>	<i>torquata</i>	B. M. McGuerty	7/13/1977	Foshay Pass
UCR-GMR 43	<i>Hypsiglena</i>	<i>torquata</i>	Luke, C.	4/29/1995	Granite Mtns Desert Res. Center, Granite Cove, Pinyon Camp Rd
CAS 174357	<i>Hypsiglena</i>	<i>torquata</i>	K. de Queiroz and J.P. O'Brien	4/22/1990	Granite Mtns, 0.5 - 0.75 mi N Dorners Camp
63473	<i>Hypsiglena</i>	<i>torquata</i>	K.S. Norris	9/18/1965	Granite Mts.
MVZ 173004	<i>Hypsiglena</i>	<i>torquata</i>	C. Markmann, J.V.M.	5/26/1978	Ivanpah Spr.
MVZ 193328	<i>Hypsiglena</i>	<i>torquata</i>	Harry W. Greene	5/15/1984	Kelbaker Rd. E of Granite Mts.
MVZ 206946	<i>Hypsiglena</i>	<i>torquata</i>	B. R. Moon	4/28/1987	Kelbaker Rd., 17.1 mi N Hwy. 40
MVZ 173005	<i>Hypsiglena</i>	<i>torquata</i>	B. M. McGuerty	7/18/1977	Piute Cr.
MVZ 173006	<i>Hypsiglena</i>	<i>torquata</i>	B. M. McGuerty	7/18/1977	Piute Cr.
MVZ 173007	<i>Hypsiglena</i>	<i>torquata</i>	B. M. McGuerty	7/18/1977	Piute Cr.
MVZ 204223	<i>Lampropeltis</i>	<i>getula</i>	Claudia A. Luke	7/15/1985	2.6 mi N of I-40 on Kelbaker Rd.
MVZ 26657	<i>Lampropeltis</i>	<i>getula</i>	Thomas L. Rodgers	6/1/1938	Cedar Canyon, Providence Mts.
23233	<i>Lampropeltis</i>	<i>getula</i>	Porter; Brown	6/12/1965	Granite Mtns.
MVZ 173011	<i>Lampropeltis</i>	<i>getula</i>	C. Markmann, J.V.M.	7/7/1978	I-15, 2.5 mi E Cima Rd.
2515	<i>Lampropeltis</i>	<i>getula</i>	CM Dammers	9/13/1936	Ivanpah, New York Mts.
MVZ 207921	<i>Lampropeltis</i>	<i>getula</i>	B. R. Moon	5/4/1987	Kelbaker Rd., 2.1 mi N Hwy. 40
MVZ 207923	<i>Lampropeltis</i>	<i>getula</i>	B. R. Moon		Kelbaker Rd., 5.7 mi S Vulcan Mine Rd.
MVZ 70546	<i>Lampropeltis</i>	<i>getula</i>	John M. Burns	4/20/1960	Keystone Canyon, New York Mts.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 207922	<i>Lampropeltis</i>	<i>getula</i>	B. R. Moon	5/14/1987	Vulcan Mine Rd., 1.9 mi E Kelbaker Rd., Providence Mts.
UCR-GMR 45	<i>Lampropeltis</i>	<i>getulus</i>	Jayne, Bruce	6/22/1999	At turn off to Granite Mts Reserve from Kelbaker Rd.
UCR-GMR 44	<i>Lampropeltis</i>	<i>getulus</i>	Minden, R. L.	5/22/1978	Granite Mtns Cove Sp. T 8N R 12E Sect. 8 SE 1/4
UCR-GMR 71	<i>Leptotyphlops</i>	<i>humilis</i>	-		-
MVZ 173048	<i>Leptotyphlops</i>	<i>humilis</i>	G. Keasler	6/10/1978	0.25 mi S Soda Spr.
MVZ 173046	<i>Leptotyphlops</i>	<i>humilis</i>	B. M. McGuerty	6/5/1977	Piute Cr.
MVZ 173047	<i>Leptotyphlops</i>	<i>humilis</i>	B. M. McGuerty	6/5/1977	Piute Cr.
UCR-GMR 47	<i>Lichanura</i>	<i>trivirgata</i>	Minden, R. L.	5/29/1978	Granite Mtns. Cove Sp. T. 8N R 12E Sect. 8 SE 1/4
UCR-GMR 62	<i>Masticophis</i>	<i>flagellum</i>	Nagy, Ken	5/27/1998	0.5 mi N Granite Pass, Kelbaker Rd.
UCR-GMR 63	<i>Masticophis</i>	<i>flagellum</i>	Luke, C.	5/16/1998	100ft W of reserve gate at NE corner of reserve, 3/4 mi E of mouth of Cottonwood Basin on dirt road
UCR-GMR 64	<i>Masticophis</i>	<i>flagellum</i>	Luke, C.	9/12/1996	17 mi N of Kelso on Kelbaker Rd.
MVZ 26938	<i>Masticophis</i>	<i>flagellum</i>	M. D. Arvey	5/13/1938	2 mi NNE Cima
UCR-GMR 61	<i>Masticophis</i>	<i>flagellum</i>	Luke, C.	9/12/1996	6.2 miles N of I-40 on Kelbaker Rd
UCR-GMR 65	<i>Masticophis</i>	<i>flagellum</i>	Luke, C.	5/1/1997	6.4 mi N Granite Pass, Kelbaker Rd.
36605	<i>Masticophis</i>	<i>flagellum</i>	Lester & Northern	5/26/1967	6.5 mi. S. of Cima
MVZ 193337	<i>Masticophis</i>	<i>flagellum</i>	Harry W. Greene	6/23/1982	6.6 mi N I-40 on Kelbaker Rd.
122456	<i>Masticophis</i>	<i>flagellum</i>	LA Lester & TC Olmstead	4/22/1976	Coyote Springs; 11 mi. S, 1 mi. W. Kelso T 9N, R 12 E, Sec 24, SE 1/4
UCR-GMR 59	<i>Masticophis</i>	<i>flagellum</i>	Secor, Stephen	7/9/1989	Dirt Road to Granite Cove, 0.5 mi. W of Kelbaker Road R13E T8N Sec 20
UCR-GMR 58	<i>Masticophis</i>	<i>flagellum</i>	Minden, R. L.	4/20/1978	Granite Mtns, Cottonwood Wash Rd. T9N R13E Sect 32
MVZ 214656	<i>Masticophis</i>	<i>flagellum</i>	C. A. Luke, S. Secor	6/17/1988	Granite Pass, Kelbaker Rd.
MVZ 28563	<i>Masticophis</i>	<i>flagellum</i>	Alden H. Miller)	5/23/1939	Hwy. S of Clark Mt.
CAS 162495	<i>Masticophis</i>	<i>flagellum</i>	D. Herlocker	4/16/1987	Kelbaker Rd, first lava flow S of Baker
UCR-GMR 219	<i>Masticophis</i>	<i>flagellum</i>	Sexton, J.	10/30/2002	Kelbaker Rd., 3.2 miles north of I-40
MVZ 214655	<i>Masticophis</i>	<i>flagellum</i>	C. A. Luke, S. Secor	5/31/1988	Kelbaker Rd., 4 mi S Kelso
UCR-GMR 56	<i>Masticophis</i>	<i>flagellum</i>	Coupe, B.	4/29/2001	Kelbaker Rd.: N 34 57' 07.9" W 115 38' 32.4"
UCR-GMR 57	<i>Masticophis</i>	<i>flagellum</i>	Coupe, B.	4/29/2001	Kelbaker Rd.: N 34 55' 16.7" W 115 38' 50.3"
UCR-GMR 60	<i>Masticophis</i>	<i>flagellum</i>	Secor, Stephen	7/13/1989	Kelbaker Road, 0.2 miles NE of Dunes Road R13E T9N Sec. 6
SDNHM Z34055	<i>Masticophis</i>	<i>flagellum</i>	S. D. Zoo	6/13/1941	Kelso
YPM 12604	<i>Masticophis</i>	<i>flagellum</i>	Marc Gauthier	5/21/2001	Mojave Desert National Preserve
YPM 10366	<i>Masticophis</i>	<i>flagellum</i>	Jacques A. Gauthier	5/20/2001	N35.286000 W115.529000
MVZ 35884	<i>Masticophis</i>	<i>flagellum</i>	Harvey I. Fisher	6/24/1940	Pass betw. Granite & Providence Mts.
MVZ 173017	<i>Masticophis</i>	<i>flagellum</i>	B. M. McGuerty	7/5/1977	Piute Cr.
MVZ 207904	<i>Masticophis</i>	<i>flagellum</i>	B. R. Moon	4/25/1987	Powerline Rd., 1.3 mi E Kelbaker Rd., Providence Mts.
122457	<i>Masticophis</i>	<i>flagellum</i>	LA Lester & TC Olmstead	4/23/1976	S. of Granite Pass; 3 mi. N. jct. Inst. 40 on Kelbaker Rd.
MVZ 161552	<i>Masticophis</i>	<i>flagellum</i>	Robert L. Seib	12-13 June 1978	vicinity of Kelso Dunes
MVZ 150189	<i>Masticophis</i>	<i>taeniatus</i>	Leon Hunter	6/3/1977	0.25 mi W of Midhills Campground
138170	<i>Masticophis</i>	<i>taeniatus</i>	R.D. Knox, Jr.	3/26/1960	8 mi S. Kelso, Kaiser-Vulcan Mine
2271	<i>Masticophis</i>	<i>taeniatus</i>	C.H. Dammers	10/12/1936	Barnwell
MVZ 100271	<i>Masticophis</i>	<i>taeniatus</i>	Timothy Brown	6/15/1970	Black Canyon Rd., 0.8 km S of Cedar Canyon, 11.2 km SE Cima
MVZ 28564	<i>Masticophis</i>	<i>taeniatus</i>	Alden H. Miller	5/17/1939	Clark Mt.
20589	<i>Masticophis</i>	<i>taeniatus</i>	Norris & Reeder	8/27/1950	Clark Mts.
UCR-GMR 48	<i>Masticophis</i>	<i>taeniatus</i>	Minden, R. L.	4/18/1978	Granite Mtns T. 8N R 12E Sect. 14
MVZ 41703	<i>Masticophis</i>	<i>taeniatus</i>	Ward C. Russell	10/3/1945	N side Clark Mt.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 28565	<i>Masticophis</i>	<i>taeniatus</i>	Ward C. Russell	5/20/1939	SE side Clark Mt.
MVZ 28566	<i>Masticophis</i>	<i>taeniatus</i>	Ronald W. Smith	5/22/1939	SE side Clark Mt.
UCR-GMR 22	<i>Phrynosoma</i>	<i>platyrhinos</i>	Luke, C.	5/2/1995	~ 1/8 mile E of pink house on White Fang Road, Sweeney Granite Mountains Desert Research Center
MVZ 172854	<i>Phrynosoma</i>	<i>platyrhinos</i>	G. Keasler	6/10/1978	0.25 mi S Soda Spr.
MVZ 172852	<i>Phrynosoma</i>	<i>platyrhinos</i>	J.V.M.	6/3/1978	0.5 mi E Ivanpah Spr.
UCR-GMR 20	<i>Phrynosoma</i>	<i>platyrhinos</i>	Luke, C.	4/19/1998	0.5 miles E of pink house on White Fang Road, Sweeney Granite Mountains Desert Research Center
UCR-GMR 21	<i>Phrynosoma</i>	<i>platyrhinos</i>	Luke, C.	5/16/1998	0.5 miles E of pink house on White Fang Road, Sweeney Granite Mountains Desert Research Center
MVZ 26426	<i>Phrynosoma</i>	<i>platyrhinos</i>	M. D. Arvey	5/16/1938	0.75 mi E Cima
MVZ 26422	<i>Phrynosoma</i>	<i>platyrhinos</i>	David H. Johnson	5/14/1938	2 mi NNE Cima
MVZ 26423	<i>Phrynosoma</i>	<i>platyrhinos</i>	David H. Johnson	5/14/1938	2 mi NNE Cima
MVZ 26424	<i>Phrynosoma</i>	<i>platyrhinos</i>	David H. Johnson	5/15/1938	2 mi NNE Cima
MVZ 172850	<i>Phrynosoma</i>	<i>platyrhinos</i>	J.V.M.	6/24/1978	2 mi W Green's Well
MVZ 26428	<i>Phrynosoma</i>	<i>platyrhinos</i>	Thomas L. Rodgers	6/10/1938	2.5 mi WSW Hidden Hill Mine, Providence Mts.
MVZ 26429	<i>Phrynosoma</i>	<i>platyrhinos</i>	Thomas L. Rodgers	6/11/1938	20 mi NNE Amboy, SE end Granite Mts.
MVZ 26430	<i>Phrynosoma</i>	<i>platyrhinos</i>	Thomas L. Rodgers	6/11/1938	20 mi NNE Amboy, SE end Granite Mts.
MVZ 26427	<i>Phrynosoma</i>	<i>platyrhinos</i>	Elmer C. Aldrich	5/20/1938	3 mi SE Cima
37650	<i>Phrynosoma</i>	<i>platyrhinos</i>	Lester Northern	5/24/1967	3 mi. S, 7 mi. E Cima
36598	<i>Phrynosoma</i>	<i>platyrhinos</i>	Lester & Northern	5/26/1967	4 mi S, 5 mi E Cima
36599	<i>Phrynosoma</i>	<i>platyrhinos</i>	Lester & Northern	5/26/1967	4 mi S, 5 mi E Cima
MVZ 26425	<i>Phrynosoma</i>	<i>platyrhinos</i>	David H. Johnson	5/15/1938	5 mi SW Ivanpah
MVZ 31709	<i>Phrynosoma</i>	<i>platyrhinos</i>	R. R. Miller	7/3/1939	5.0-5.5 mi S Baker
MVZ 31710	<i>Phrynosoma</i>	<i>platyrhinos</i>	R. R. Miller	7/3/1939	5.0-5.5 mi S Baker
MVZ 28509	<i>Phrynosoma</i>	<i>platyrhinos</i>	Ward C. Russell	5/26/1939	8 mi W Clark Mt.
101754	<i>Phrynosoma</i>	<i>platyrhinos</i>	B Wilder	4/11/1959	9 mi SE Kelso at Kaiser Vulcan Iron Mine
CAS 189962	<i>Phrynosoma</i>	<i>platyrhinos</i>	A. Rice	1975	between Kelso and Baker
MVZ 26421	<i>Phrynosoma</i>	<i>platyrhinos</i>	Thomas L. Rodgers	6/1/1938	Cima
MVZ 172848	<i>Phrynosoma</i>	<i>platyrhinos</i>	J.V.M.	5/10/1978	Cima Rd., 4 mi N I-15
MVZ 172849	<i>Phrynosoma</i>	<i>platyrhinos</i>	J.V.M.	5/19/1978	Cima Rd., 8 mi N I-15
UCR-GMR 23	<i>Phrynosoma</i>	<i>platyrhinos</i>	Minden, R. L.	4/20/1978	Granite Mountains, Kelbaker Rd @ Cottonwood Wash crossing T. 9N R. 13E Sect. 28 S.W. 1/4
MVZ 172851	<i>Phrynosoma</i>	<i>platyrhinos</i>	J.V.M.	7/21/1978	Ivanpah Spr.
MVZ 207901	<i>Phrynosoma</i>	<i>platyrhinos</i>	B. R. Moon	4/22/1987	Kelbaker Rd., 13.25 mi N of Kelso
122429	<i>Phrynosoma</i>	<i>platyrhinos</i>	LA Lester & TC Olmstead	4/21/1976	Kelso Dunes; 9.2 mi. S, 5.1 mi. W. Kelso T 9N, R 12E, Sec 8 SE 1/4
SDNHM Z49061	<i>Phrynosoma</i>	<i>platyrhinos</i>	Dr. Cox et al.	5/4/1968	Kelso Sand Dunes
YPM 10378	<i>Phrynosoma</i>	<i>platyrhinos</i>	Jacques A. Gauthier	5/20/2001	N34.895700 W115.703800
122428	<i>Phrynosoma</i>	<i>platyrhinos</i>	LA Lester & TC Olmstead	4/29/1976	Old Dad Mtn; 3.7 mi. N, 12.3 mi. W. Kelso T 11N, R 10E, Sec 1, NW 1/4
MVZ 172853	<i>Phrynosoma</i>	<i>platyrhinos</i>	B. M. McGuerty	6/4/1977	Providence Mts.
SDNHM Z29667	<i>Phrynosoma</i>	<i>platyrhinos</i>	Rodgers, Tom	6/9/1938	Providence Mts., Mitchell's Caverns
137913	<i>Phrynosoma</i>	<i>platyrhinos</i>	S Werman	4/30/1977	S side Kelso Dunes, ~3 mi W Kelbaker Rd
MVZ 161460	<i>Phrynosoma</i>	<i>platyrhinos</i>	Robert L. Seib	12-13 June 1978	vicinity of Kelso Dunes
MVZ 161461	<i>Phrynosoma</i>	<i>platyrhinos</i>	Robert L. Seib	12-13 June 1978	vicinity of Kelso Dunes
MVZ 161462	<i>Phrynosoma</i>	<i>platyrhinos</i>	Robert L. Seib	12-13 June 1978	vicinity of Kelso Dunes
MVZ 161463	<i>Phrynosoma</i>	<i>platyrhinos</i>	Robert L. Seib	12-13 June 1978	vicinity of Kelso Dunes
MVZ 161464	<i>Phrynosoma</i>	<i>platyrhinos</i>	Robert L. Seib	12-13 June 1978	vicinity of Kelso Dunes
MVZ 161465	<i>Phrynosoma</i>	<i>platyrhinos</i>	Robert L. Seib	12-13 June 1978	vicinity of Kelso Dunes
MVZ 161466	<i>Phrynosoma</i>	<i>platyrhinos</i>	Robert L. Seib	12-13 June 1978	vicinity of Kelso Dunes
MVZ 161467	<i>Phrynosoma</i>	<i>platyrhinos</i>	Robert L. Seib	12-13 June 1978	vicinity of Kelso Dunes
MVZ 161468	<i>Phrynosoma</i>	<i>platyrhinos</i>	Robert L. Seib	12-13 June 1978	vicinity of Kelso Dunes

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 161469	<i>Phrynosoma</i>	<i>platyrhinos</i>	Robert L. Seib	12-13 June 1978	vicinity of Kelso Dunes
138177	<i>Phyllorhynchus</i>	<i>decurtatus</i>	R.B. Loomis	6/3/1977	6.1 mi S. Kelso on Kelbaker Rd
126242	<i>Phyllorhynchus</i>	<i>decurtatus</i>	R.L. Bezy, LA Lester, W Haocke	7/1/1977	8.2 mi. (by RR rd) WSW Kelso
138176	<i>Phyllorhynchus</i>	<i>decurtatus</i>	R.B. Loomis	6/2/1977	9 mi E. Baker on Keibaker Rd
MVZ 173020	<i>Phyllorhynchus</i>	<i>decurtatus</i>	C. Markmann, J.V.M.	6/9/1978	Cima Rd., 4 mi N of Interstate 15
CAS 200846	<i>Phyllorhynchus</i>	<i>decurtatus</i>	J.P. O'Brien	5/9/1988	Kelbaker Rd, 2-5 mi S of Baker
MVZ 207909	<i>Phyllorhynchus</i>	<i>decurtatus</i>	B. R. Moon		Kelbaker Rd., 0.2 mi S Kelso
UCR-GMR 68	<i>Phyllorhynchus</i>	<i>decurtatus</i>	Secor, Stephen	6/25/1989	Kelbaker Road 2.5 miles SE of Kelso
UCR-GMR 67	<i>Phyllorhynchus</i>	<i>decurtatus</i>	Secor, Stephen	6/25/1989	Kelbaker Road, 6 miles SE of Kelso
UCR-GMR 66	<i>Phyllorhynchus</i>	<i>decurtatus</i>	Minden, R. L.	6/4/1978	South of Granite Mtns by 4 miles -- on Kelbaker T10N R13E Sect. 30 NW 1/4
MVZ 170770	<i>Phyllorhynchus</i>	<i>decurtatus</i>	Robert L. Seib	12-13 June 1979	vicinity of Kelso Dunes
MVZ 170771	<i>Phyllorhynchus</i>	<i>decurtatus</i>	Robert L. Seib	12-13 June 1979	vicinity of Kelso Dunes
MVZ 204232	<i>Pituophis</i>	<i>catenifer</i>	Harry W. Greene	7/4/1986	17.7 mi N Kelso on Kelbaker Rd.
MVZ 204231	<i>Pituophis</i>	<i>catenifer</i>	Harry W. Greene	4/26/1986	27.6 mi S Baker, on Kelbaker Rd.
MVZ 26656	<i>Pituophis</i>	<i>catenifer</i>	Thomas L. Rodgers	5/24/1938	3 mi N Cima
36792	<i>Pituophis</i>	<i>catenifer</i>	Northern & Lester	5/23/1967	6 1/2 mi. S., 6 mi. E. Cima
20892	<i>Pituophis</i>	<i>catenifer</i>	Norris & Zweifel	4/29/1950	8 mi. NE Cima
MVZ 206943	<i>Pituophis</i>	<i>catenifer</i>	B. R. Moon	5/6/1987	ca. 9 mi N Hwy. 40 on Kelbaker Rd.
MVZ 173031	<i>Pituophis</i>	<i>catenifer</i>	C. Markmann , J.V.M.	6/9/1978	Cima Rd., 6 mi N Interstate 15
MVZ 26655	<i>Pituophis</i>	<i>catenifer</i>	Thomas L. Rodgers	5/27/1938	Government Holes, Providence Mts.
MVZ 214634	<i>Pituophis</i>	<i>catenifer</i>	C. A. Luke, P. Cohen	5/28/1988	Granite Mt. Reserve
22236	<i>Pituophis</i>	<i>catenifer</i>	Porter	5/15/1965	Granite mts., Kelso Rd at turnoff to spa
MVZ 39613	<i>Pituophis</i>	<i>catenifer</i>	E. Kozloff	4/23/1939	Granite Well, Granite Mts.
MVZ 173032	<i>Pituophis</i>	<i>catenifer</i>	C. Markmann, J.V.M.	6/3/1978	Ivanpah Spr.
MVZ 207920	<i>Pituophis</i>	<i>catenifer</i>	B. R. Moon	5/12/1987	Kelbaker Rd., 1 mi N Hwy. 40
MVZ 193414	<i>Pituophis</i>	<i>catenifer</i>	Harry W. Greene	5/7/1983	Kelso Dunes
SDNHM Z31552	<i>Pituophis</i>	<i>catenifer</i>	Hoard, Robert	5/23/1939	Lanfair
MVZ 28568	<i>Pituophis</i>	<i>catenifer</i>	Ward C. Russell	5/27/1939	N side Clark Mt.
SDNHM Z29651	<i>Pituophis</i>	<i>catenifer</i>	Rodgers, Tom	5/28/1938	Providence Mts., 3 mi. N. of Cedar Canyon
MVZ 26654	<i>Pituophis</i>	<i>catenifer</i>	Thomas L. Rodgers	6/4/1938	Rock Spr., Providence Mts.
UCR-GMR 51	<i>Pituophis</i>	<i>melanoleucus</i>	-		-
UCR-GMR 221	<i>Pituophis</i>	<i>melanoleucus</i>	Korff, W.	6/18/2001	1.8 mi. N Granite Cove cutoff, Kelbaker Rd., N 34 47.259' W 115 36.756'
UCR-GMR 52	<i>Pituophis</i>	<i>melanoleucus</i>	Luke, C.	5/29/1998	Essex Rd., 1 mi N of I-40
UCR-GMR 53	<i>Pituophis</i>	<i>melanoleucus</i>	Minden, R. L.	5/20/1978	Granite Mtns. Dripping Sp.
UCR-GMR 54	<i>Pituophis</i>	<i>melanoleucus</i>	Secor, Stephen	5/19/1989	Kelbaker Road, 1 mi NW Granite Pass
UCR-GMR 55	<i>Pituophis</i>	<i>melanoleucus</i>	Cohen, P & Stead, G.	6/20/1989	Kelbaker Rd, 1.5 mi NW Granite Pass
MVZ 214653	<i>Rhinocheilus</i>	<i>lecontei</i>	Claudia A. Luke	5/11/1988	1.5 mi N I-40 on Kelbaker Rd.
UCR-GMR 69	<i>Rhinocheilus</i>	<i>lecontei</i>	Luke, C.	5/29/1998	1.5 mi N Granite Pass on Kelbaker Rd
MVZ 193322	<i>Rhinocheilus</i>	<i>lecontei</i>	Harry W. Greene	6/17/1983	10.3 mi N I-40 on Kelbaker Rd.
MVZ 214654	<i>Rhinocheilus</i>	<i>lecontei</i>	C. A. Luke, S. Secor	5/15/1988	11.5 mi S Baker, Kelbaker Rd.
138186	<i>Rhinocheilus</i>	<i>lecontei</i>	RB Loomis	6/3/1977	22.8 mi. SE Baker on Kelbaker Rd
UAZ 4550	<i>Rhinocheilus</i>	<i>lecontei</i>	B. Hicks and V. Wilson	8/20/1955	4 mi E Baker
MVZ 26658	<i>Rhinocheilus</i>	<i>lecontei</i>	Elmer C. Aldrich	5/23/1938	5 mi SE Cima, Providence Mts.
MVZ 173035	<i>Rhinocheilus</i>	<i>lecontei</i>	C. Markmann, J.V.M.	5/12/1978	Cima Rd., 3.5 mi N I-15
MVZ 207928	<i>Rhinocheilus</i>	<i>lecontei</i>	B. R. Moon	5/18/1987	Essex Rd., 2.4 mi NW Hwy. 40
MVZ 146259	<i>Rhinocheilus</i>	<i>lecontei</i>	E. Wessman	5/12/1976	Ivanpah Valley
UCR-GMR 225	<i>Rhinocheilus</i>	<i>lecontei</i>	Coupe, B. & Alsbach, L.	5/16/2003	Kelbaker Rd at intersection with Granite Cove Rd
UCR-GMR 73	<i>Rhinocheilus</i>	<i>lecontei</i>	Coupe, B.	5/9/2001	Kelbaker Rd. N 34 50' 02.9" W 115 37' 27.4"
UCR-GMR 74	<i>Rhinocheilus</i>	<i>lecontei</i>	Coupe, B.	6/3/2001	Kelbaker Rd. N 34 47' 33.1" W 115 36' 36.7"
MVZ 207926	<i>Rhinocheilus</i>	<i>lecontei</i>	B. R. Moon	5/14/1987	Kelbaker Rd., 1.1 mi N Hwy. 40
MVZ 207927	<i>Rhinocheilus</i>	<i>lecontei</i>	B. R. Moon	5/14/1987	Kelbaker Rd., 1.3 mi S Vulcan Mine Rd.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 207925	<i>Rhinocheilus</i>	<i>lecontei</i>	B. R. Moon	4/25/1987	Kelbaker Rd., 4.5 mi S Kelso
MVZ 214652	<i>Salvadora</i>	<i>hexalepis</i>	Claudia A. Luke	3/26/1988	1.25 mi E Kelbaker Rd. on Vulcan Mine Rd. near Kelso
103075	<i>Salvadora</i>	<i>hexalepis</i>	E. L. Sleeper	3/25/1960	12 miles N Rt. 66 on Kelbaker Rd.
103076	<i>Salvadora</i>	<i>hexalepis</i>	R. D. Knox, Sr.	3/26/1960	8 miles S Kelso, Kaiser-Vulcan Mine
MVZ 214650	<i>Salvadora</i>	<i>hexalepis</i>	C. A. Luke, C. Stead	4/9/1988	ca. 4 mi N I-40 on Kelbaker Rd.
MVZ 214651	<i>Salvadora</i>	<i>hexalepis</i>	Claudia A. Luke	4/9/1988	ca. 4 mi N I-40 on Kelbaker Rd.
MVZ 26649	<i>Salvadora</i>	<i>hexalepis</i>	Thomas L. Rodgers	5/31/1938	Cedar Canyon, Providence Mts.
MVZ 26650	<i>Salvadora</i>	<i>hexalepis</i>	Thomas L. Rodgers	6/4/1938	Cedar Canyon, Providence Mts.
MVZ 173037	<i>Salvadora</i>	<i>hexalepis</i>	C. Markmann, J.V.M.	6/9/1978	Cima Rd., 8 mi N I-15
UCR-GMR 218	<i>Salvadora</i>	<i>hexalepis</i>	Alsbach,L.D.	4/5/2003	GOR on road by Staples house
23244	<i>Salvadora</i>	<i>hexalepis</i>	Ahearu	4/24/1965	Granite Mtns.
UCR-GMR 49	<i>Salvadora</i>	<i>hexalepis</i>	Minden, R. L.	4/24/1978	Granite Mtns. Willow Spring Basin Wash T. 8N R 12E Sect. 23
MVZ 173038	<i>Salvadora</i>	<i>hexalepis</i>	C. Markmann, J.V.M.	6/10/1978	Ivanpah Spr.
MVZ 207912	<i>Salvadora</i>	<i>hexalepis</i>	B. R. Moon	4/24/1987	Kelbaker Rd., 10.1 mi N Hwy. 40
MVZ 207910	<i>Salvadora</i>	<i>hexalepis</i>	B. R. Moon	4/9/1987	Kelbaker Rd., 4.6 mi N Hwy. 40
UCR-GMR 50	<i>Salvadora</i>	<i>hexalepis</i>	Secor, Stephen	4/16/1989	Kelbaker Rd., Granite Pass, 12 miles SW of Kelso R 13E T 8N Sec 10
YPM 12538	<i>Salvadora</i>	<i>hexalepis</i>	Marc Gauthier	5/20/2001	Mojave Desert National Preserve
122458	<i>Salvadora</i>	<i>hexalepis</i>	LA Lester & TC Olmstead	4/22/1976	near Granite Pass; 11 mi. S. Kelso T 9N, R 13E, Sec 19 SW 1/4
SDNHM Z29652	<i>Salvadora</i>	<i>hexalepis</i>	Rodgers, Tom	5/31/1938	Providence Mts., Cedar Canyon
MVZ 26295	<i>Sauromalus</i>	<i>obesus</i>	David H. Johnson	5/15/1938	5 mi SW Ivanpah
MVZ 26296	<i>Sauromalus</i>	<i>obesus</i>	Thomas L. Rodgers, David H. Johnson	6/10/1938	8.5 mi NW Essex
138121	<i>Sauromalus</i>	<i>obesus</i>	SD Werman	5/25/1978	13.9 mi. S Baker off Kelbaker Rd.
138122	<i>Sauromalus</i>	<i>obesus</i>	SD Werman	5/25/1978	13.9 mi. S Baker off Kelbaker Rd.
138120	<i>Sauromalus</i>	<i>obesus</i>	SD Werman	7/11/1978	13.9 mi. S Baker off Kelbaker Rd
SDNHM Z39989	<i>Sauromalus</i>	<i>obesus</i>	Klauber, L. M., C. E. Shaw	6/4/1949	Baker, 7 mi. SW. of
122430	<i>Sauromalus</i>	<i>obesus</i>	LA Lester & TC Olmstead	4/24/1976	Coyote Springs; 11 mi. S, 1 mi. W. Kelso T 9N, R 12E, Sec 24 SE 1/4
UCR-GMR 8	<i>Sauromalus</i>	<i>obesus</i>	Minden, R. L.	4/22/1978	Granite Mountains, Carr Wash T. 9N R. 12E Sect. 25
CAS 178159	<i>Sauromalus</i>	<i>obesus</i>	J.P. O'Brien	6/4/1988	Kelbaker Rd, 3-11 mi S of Baker
MVZ 39238	<i>Sauromalus</i>	<i>obesus</i>	Harvey I. Fisher	6/25/1940	Pass betw. Granite & Providence Mtns
MVZ 40656	<i>Sauromalus</i>	<i>obesus</i>	Harvey I. Fisher	6/25/1940	Pass betw. Granite & Providence Mtns
CAS 174465	<i>Sauromalus</i>	<i>obesus</i>	J.P. O'Brien	1-4 Jun 88	vic Kelbaker Rd
126238	<i>Sauromalus</i>	<i>obesus</i>	R.L. Bezy and JW Wright	7/1/1977	vic. Coyote Springs 11 mi. S., 1mi. W. Kelso T9N R12E SE1/4 Sec 24
67317	<i>Sceloporus</i>	<i>magister</i>	R.G. Crippen	5/31/1970	10 mi E, 7.5 mi S Cima
MVZ 26383	<i>Sceloporus</i>	<i>magister</i>	David H. Johnson	5/13/1938	2 mi E Cima
MVZ 26397	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	6/4/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 26398	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	6/5/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 26399	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	6/5/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 26384	<i>Sceloporus</i>	<i>magister</i>	David H. Johnson	5/13/1938	2 mi NNE Cima
MVZ 172872	<i>Sceloporus</i>	<i>magister</i>	J.V.M.	6/24/1978	2 mi W of Green's Well
MVZ 26386	<i>Sceloporus</i>	<i>magister</i>	Elmer C. Aldrich	5/20/1938	3 mi SE Cima
MVZ 26385	<i>Sceloporus</i>	<i>magister</i>	M. D. Arvey	5/15/1938	5 mi SW Ivanpah
36587	<i>Sceloporus</i>	<i>magister</i>	Lester & Northern	5/23/1967	6.5 mi S, 6 mi E Cima
36588	<i>Sceloporus</i>	<i>magister</i>	Lester & Northern	5/23/1967	6.5 mi S, 6 mi E Cima
36589	<i>Sceloporus</i>	<i>magister</i>	Lester & Northern	5/23/1967	6.5 mi S, 6 mi E Cima
36590	<i>Sceloporus</i>	<i>magister</i>	Lester & Northern	5/23/1967	6.5 mi S, 6 mi E Cima
MVZ 28489	<i>Sceloporus</i>	<i>magister</i>	Aldo S. Leopold	5/28/1939	8 mi W Clark Mt.
MVZ 207853	<i>Sceloporus</i>	<i>magister</i>	B. R. Moon	4/6/1987	ca. 0.75 mi NW Cornfield Spring, Providence Mts.
MVZ 146246	<i>Sceloporus</i>	<i>magister</i>	E. Wessman	5/13/1976	Cedar Canyon Rd., Providence Mts.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 26387	<i>Sceloporus</i>	<i>magister</i>	David H. Johnson	5/22/1938	Cedar Canyon, Providence Mts.
MVZ 26388	<i>Sceloporus</i>	<i>magister</i>	David H. Johnson	5/22/1938	Cedar Canyon, Providence Mts.
MVZ 26389	<i>Sceloporus</i>	<i>magister</i>	David H. Johnson	5/22/1938	Cedar Canyon, Providence Mts.
MVZ 26390	<i>Sceloporus</i>	<i>magister</i>	Elmer C. Aldrich	5/23/1938	Cedar Canyon, Providence Mts.
MVZ 26391	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	5/24/1938	Cedar Canyon, Providence Mts.
MVZ 26392	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26393	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	5/28/1938	Cedar Canyon, Providence Mts.
MVZ 26394	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	5/28/1938	Cedar Canyon, Providence Mts.
MVZ 26395	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	5/31/1938	Cedar Canyon, Providence Mts.
MVZ 26396	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	6/4/1938	Cedar Canyon, Providence Mts.
MVZ 172870	<i>Sceloporus</i>	<i>magister</i>	J.V.M.	5/12/1978	Cima Rd., 8 mi N I-15
MVZ 26400	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26401	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 26402	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
MVZ 172871	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty	6/12/1977	Foshay Pass
MVZ 207855	<i>Sceloporus</i>	<i>magister</i>	B. R. Moon	5/6/1987	Goldstone Spring, Providence Mts.
MVZ 207856	<i>Sceloporus</i>	<i>magister</i>	B. R. Moon	5/6/1987	Goldstone Spring, Providence Mts.
17272	<i>Sceloporus</i>	<i>magister</i>	Zweifel	4/26/1950	Granite Mtns, Cottonwood Springs
17273	<i>Sceloporus</i>	<i>magister</i>	Zweifel	4/26/1950	Granite Mtns, Cottonwood Springs
UCR-GMR 25	<i>Sceloporus</i>	<i>magister</i>	Minden, R. L.	4/24/1978	Granite Mountains, Willow Spring Basin Wash T. 8N R. 12E Sect. 23
23258	<i>Sceloporus</i>	<i>magister</i>	Portor	6/12/1965	Granite Mtns.
23259	<i>Sceloporus</i>	<i>magister</i>	Portor	6/17/1965	Granite Mtns.
23260	<i>Sceloporus</i>	<i>magister</i>	Ahearu	4/24/1965	Granite Mtns.
23261	<i>Sceloporus</i>	<i>magister</i>	Portor	5/15/1965	Granite Mtns.
23262	<i>Sceloporus</i>	<i>magister</i>	Ahearu	4/24/1965	Granite Mtns.
23263	<i>Sceloporus</i>	<i>magister</i>	Portor	7/17/1965	Granite Mtns.
23264	<i>Sceloporus</i>	<i>magister</i>	Portor	7/17/1965	Granite Mtns.
23265	<i>Sceloporus</i>	<i>magister</i>	Portor	7/17/1965	Granite Mtns.
23266	<i>Sceloporus</i>	<i>magister</i>	Ahearu	4/24/1965	Granite Mtns.
23267	<i>Sceloporus</i>	<i>magister</i>	Porter	6/12/1965	Granite Mtns.
113727	<i>Sceloporus</i>	<i>magister</i>	W Porter	5/15/1965	Granite Mts, Cove Spring
22277	<i>Sceloporus</i>	<i>magister</i>	Porter	8/13/1965	Granite Mts.
22313	<i>Sceloporus</i>	<i>magister</i>	Porter	6/12/1965	Granite Mts.
74198	<i>Sceloporus</i>	<i>magister</i>	K.S. Norris	9/18/1965	Granite Mts.
74199	<i>Sceloporus</i>	<i>magister</i>	K.S. Norris	9/18/1965	Granite Mts.
74200	<i>Sceloporus</i>	<i>magister</i>	K.S. Norris	9/18/1965	Granite Mts.
MVZ 206234	<i>Sceloporus</i>	<i>magister</i>	A. D. Driscoll	5/20/1986	Granite Mts. Plateau, 17 mi S [Air] Kelso, Granite Mts.
122432	<i>Sceloporus</i>	<i>magister</i>	LA Lester & TC Olmstead	4/21/1976	Granite Pass, 11 mi. S. Kelso T 9N, R 13E, Sec 19, SE 1/4
MVZ 172875	<i>Sceloporus</i>	<i>magister</i>	J.V.M.	8/12/1978	Ivanpah Spr.
MVZ 172876	<i>Sceloporus</i>	<i>magister</i>	J.V.M. (	5/26/1978	Ivanpah Spr.
YPM 10386	<i>Sceloporus</i>	<i>magister</i>	Jacques A. Gauthier	5/20/2001	Mojave Desert National Preserve; N35.314800 W115.554900
MVZ 28490	<i>Sceloporus</i>	<i>magister</i>	Ward C. Russell	5/27/1939	N side Clark Mt.
MVZ 26403	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	6/11/1938	Pass betw. Granite & Providence Mtns
MVZ 26404	<i>Sceloporus</i>	<i>magister</i>	Thomas L. Rodgers	6/11/1938	Pass betw. Granite & Providence Mtns
MVZ 35757	<i>Sceloporus</i>	<i>magister</i>	David H. Johnson	6/23/1940	Pass betw. Granite & Providence Mtns
MVZ 35758	<i>Sceloporus</i>	<i>magister</i>	Harvey I. Fisher	6/24/1940	Pass betw. Granite & Providence Mtns
MVZ 35759	<i>Sceloporus</i>	<i>magister</i>	Harvey I. Fisher	6/24/1940	Pass betw. Granite & Providence Mtns
126149	<i>Sceloporus</i>	<i>magister</i>	E Wessman	8/20/1975	Pinto Creek, 22 mi W, 20 mi N Needles
MVZ 172879	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty	5 Jun-18 Jul 1977	Piute Cr.
MVZ 172880	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty	5 JUN-18 JUL 1977	Piute Cr.
MVZ 172881	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty	5 JUN-18 JUL 1977	Piute Cr.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 172882	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty	5 JUN-18 JUL 1977	Piute Cr.
MVZ 172883	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty	5 JUN-18 JUL 1977	Piute Cr.
MVZ 172884	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty	5 JUN-18 JUL 1977	Piute Cr.
MVZ 172885	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty	5 JUN-18 JUL 1977	Piute Cr.
MVZ 172886	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty	5 JUN-18 JUL 1977	Piute Cr.
MVZ 172887	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty	5 JUN-18 JUL 1977	Piute Cr.
MVZ 172888	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty	5 JUN-18 JUL 1977	Piute Cr.
MVZ 172889	<i>Sceloporus</i>	<i>magister</i>	B. M. McGurty)	5 JUN-18 JUL 1977	Piute Cr.
SDNHN Z60217	<i>Sceloporus</i>	<i>magister</i>	McGurty, Brian M.	6/5/1977	Piute Mtns., Piute Creek
SDNHN Z60218	<i>Sceloporus</i>	<i>magister</i>	McGurty, Brian M.	6/5/1977	Piute Mtns., Piute Creek
SDNHN Z60220	<i>Sceloporus</i>	<i>magister</i>	McGurty, Brian M.	7/5/1977	Piute Mtns., Piute Creek
SDNHN Z60219	<i>Sceloporus</i>	<i>magister</i>	McGurty, Brian M.	6/12/1977	Piute Mtns., Piute Creek
SDNHN Z60221	<i>Sceloporus</i>	<i>magister</i>	McGurty, Brian M.	7/18/1977	Piute Mtns., Piute Creek
MVZ 207854	<i>Sceloporus</i>	<i>magister</i>	B. R. Moon	4/12/1987	summit Spring, Providence Mts.
MVZ 204161	<i>Sceloporus</i>	<i>magister</i>	Jonathan B. Losos, Jonathan H. Carothers	5/21/1985	Telephone Pole near Kelso Dunes
122433	<i>Sceloporus</i>	<i>magister</i>	LA Lester & TC Olmstead	4/24/1976	Upper Cottonwood Wash; 14 mi. S, 1.7 mi. W. Kelso T 8N, R 12 E, Sec 2, SE 1/4
MVZ 207857	<i>Sceloporus</i>	<i>magister</i>	B. R. Moon	5/29/1987	Vulcan Mine area, Providence Mts.
MVZ 207858	<i>Sceloporus</i>	<i>magister</i>	B. R. Moon	5/29/1987	Vulcan Mine area, Providence Mts.
97087	<i>Sceloporus</i>	<i>occidentalis</i>	VC Bleich	9/8/1973	1 mi N New York Mtn. Rd., in Caruther's Cyn. (NY Mtns)
MVZ 172903	<i>Sceloporus</i>	<i>occidentalis</i>	C. Markmann, J.V.M.	7/7/1978	1 mi W Green's Well
MVZ 26405	<i>Sceloporus</i>	<i>occidentalis</i>	David H. Johnson	5/15/1938	5 mi SW Ivanpah
36584	<i>Sceloporus</i>	<i>occidentalis</i>	Lester & Northern	5/23/1967	6.5 mi S, 6 mi E Cima
36585	<i>Sceloporus</i>	<i>occidentalis</i>	Lester & Northern	5/23/1967	6.5 mi S, 6 mi E Cima
36586	<i>Sceloporus</i>	<i>occidentalis</i>	Lester & Northern	5/23/1967	6.5 mi S, 6 mi E Cima
MVZ 207866	<i>Sceloporus</i>	<i>occidentalis</i>	B. R. Moon	6/16/1987	Bull Canyon, Granite Mts., BORDER SECTIONS 10 & 11
MVZ 172898	<i>Sceloporus</i>	<i>occidentalis</i>	B. M. McGurty	10 JUN-5 JUL 1979	Caruthers Canyon
MVZ 172899	<i>Sceloporus</i>	<i>occidentalis</i>	B. M. McGurty	10 JUN-5 JUL 1979	Caruthers Canyon
MVZ 172900	<i>Sceloporus</i>	<i>occidentalis</i>	B. M. McGurty	10 JUN-5 JUL 1979	Caruthers Canyon
MVZ 172913	<i>Sceloporus</i>	<i>occidentalis</i>	B. M. McGurty	6/4/1977	Caruthers Canyon
UAZ 31267	<i>Sceloporus</i>	<i>occidentalis</i>	J.K. Cross	7/2/1969	Caruther's Cyn, New York Mts
MVZ 26406	<i>Sceloporus</i>	<i>occidentalis</i>	David H. Johnson	5/22/1938	Cedar Canyon, Providence Mts.
MVZ 26407	<i>Sceloporus</i>	<i>occidentalis</i>	David H. Johnson	5/22/1938	Cedar Canyon, Providence Mts.
MVZ 26408	<i>Sceloporus</i>	<i>occidentalis</i>	David H. Johnson	5/23/1938	Cedar Canyon, Providence Mts.
MVZ 26409	<i>Sceloporus</i>	<i>occidentalis</i>	Thomas L. Rodgers	5/27/1938	Cedar Canyon, Providence Mts.
MVZ 26410	<i>Sceloporus</i>	<i>occidentalis</i>	Thomas L. Rodgers	5/30/1938	Cedar Canyon, Providence Mts.
MVZ 26411	<i>Sceloporus</i>	<i>occidentalis</i>	Thomas L. Rodgers (#1177)	5/30/1938	Cedar Canyon, Providence Mts.
MVZ 26413	<i>Sceloporus</i>	<i>occidentalis</i>	Thomas L. Rodgers	5/31/1938	Cedar Canyon, Providence Mts.
MVZ 26414	<i>Sceloporus</i>	<i>occidentalis</i>	Thomas L. Rodgers	5/24/1938	Cedar Canyon, Providence Mts.
MVZ 26415	<i>Sceloporus</i>	<i>occidentalis</i>	Thomas L. Rodgers	5/24/1938	Cedar Canyon, Providence Mts.
MVZ 26416	<i>Sceloporus</i>	<i>occidentalis</i>	Thomas L. Rodgers	5/24/1938	Cedar Canyon, Providence Mts.
MVZ 26417	<i>Sceloporus</i>	<i>occidentalis</i>	Thomas L. Rodgers	5/24/1938	Cedar Canyon, Providence Mts.
MVZ 26418	<i>Sceloporus</i>	<i>occidentalis</i>	Thomas L. Rodgers	5/25/1938	Cedar Canyon, Providence Mts.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 26419	<i>Sceloporus</i>	<i>occidentalis</i>	Thomas L. Rodgers	6/1/1938	Cedar Canyon, Providence Mts.
126239	<i>Sceloporus</i>	<i>occidentalis</i>	R.L. Bezy, LA Lester, W Haoocke	7/1/1977	Cima Dome, 3.8 mi. N, 5.0 mi. W Cima T14N R13E NE1/4 Sec 21
MVZ 172902	<i>Sceloporus</i>	<i>occidentalis</i>	C. Markmann, J.V.M.	6/3/1978	Colosseum Gorge
67311	<i>Sceloporus</i>	<i>occidentalis</i>	R.G. Crippen	5/30/1970	Fourth of July Cyn., 9.5 mi E Cima
67312	<i>Sceloporus</i>	<i>occidentalis</i>	R.G. Crippen	5/30/1970	Fourth of July Cyn., 9.5 mi E Cima
67313	<i>Sceloporus</i>	<i>occidentalis</i>	R.G. Crippen	5/30/1970	Fourth of July Cyn., 9.5 mi E Cima
67314	<i>Sceloporus</i>	<i>occidentalis</i>	R.G. Crippen	5/30/1970	Fourth of July Cyn., 9.5 mi E Cima
67315	<i>Sceloporus</i>	<i>occidentalis</i>	R.G. Crippen	5/30/1970	Fourth of July Cyn., 9.5 mi E Cima
67316	<i>Sceloporus</i>	<i>occidentalis</i>	R.G. Crippen	5/31/1970	Fourth of July Cyn., 9.5 mi E Cima
UCR-GMR 26	<i>Sceloporus</i>	<i>occidentalis</i>	Minden, R. L.	4/18/1978	Granite Mtns. T. 8N R. 12E Sect. 14
23437	<i>Sceloporus</i>	<i>occidentalis</i>	Porter	5/15/1965	Granite Mtn.
23237	<i>Sceloporus</i>	<i>occidentalis</i>	Porter	5/15/1965	Granite Mtns.
23238	<i>Sceloporus</i>	<i>occidentalis</i>	Porter	6/12/1965	Granite Mtns.
MVZ 206235	<i>Sceloporus</i>	<i>occidentalis</i>	A. D. Driscoll	5/10/1986	Granite Mts. Plateau, 17 mi S [Air] Kelso, Granite Mts.
MVZ 206236	<i>Sceloporus</i>	<i>occidentalis</i>	A. D. Driscoll	5/10/1986	Granite Mts. Plateau, 17 mi S [Air] Kelso, Granite Mts.
16146	<i>Sceloporus</i>	<i>occidentalis</i>	Zweifel, Norris	4/24/1950	Granite Mts., Cottonwood Springs
16147	<i>Sceloporus</i>	<i>occidentalis</i>	Zweifel, Norris	4/24/1950	Granite Mts., Cottonwood Springs
16148	<i>Sceloporus</i>	<i>occidentalis</i>	Zweifel, Norris	4/24/1950	Granite Mts., Cottonwood Springs
16149	<i>Sceloporus</i>	<i>occidentalis</i>	Zweifel, Norris	4/24/1950	Granite Mts., Cottonwood Springs
16140	<i>Sceloporus</i>	<i>occidentalis</i>	Zweifel, Norris	4/26/1950	Granite Mts., Dorner's Camp
16141	<i>Sceloporus</i>	<i>occidentalis</i>	Zweifel, Norris	4/26/1950	Granite Mts., Dorner's Camp
16142	<i>Sceloporus</i>	<i>occidentalis</i>	Zweifel, Norris	4/26/1950	Granite Mts., Dorner's Camp
16143	<i>Sceloporus</i>	<i>occidentalis</i>	Zweifel, Norris	4/26/1950	Granite Mts., Dorner's Camp
16144	<i>Sceloporus</i>	<i>occidentalis</i>	Zweifel, Norris	4/26/1950	Granite Mts., Dorner's Camp
16145	<i>Sceloporus</i>	<i>occidentalis</i>	Zweifel, Norris	4/26/1950	Granite Mts., Dorner's Camp
MVZ 172904	<i>Sceloporus</i>	<i>occidentalis</i>	B. M. McGurt	6/6/1978	Mid Hills Campground
YPM 10440	<i>Sceloporus</i>	<i>occidentalis</i>	Jacques A. Gauthier	5/20/2001	Mojave Desert National Preserve; N35.130500 W115.43600
YPM 10485	<i>Sceloporus</i>	<i>occidentalis</i>	Jacques A. Gauthier	5/21/2001	Mojave Desert National Preserve; N35.130500 W115.43600
YPM 10486	<i>Sceloporus</i>	<i>occidentalis</i>	Jacques A. Gauthier	5/22/2001	Mojave Desert National Preserve; N35.130500 W115.43600
YPM 10439	<i>Sceloporus</i>	<i>occidentalis</i>	Jacques A. Gauthier	5/23/2001	Mojave Desert National Preserve; N35.130500 W115.43600
MVZ 172901	<i>Sceloporus</i>	<i>occidentalis</i>	C. Markmann, J.V.M.	9/12/1978	N Face Clark Mt.
MVZ 28500	<i>Sceloporus</i>	<i>occidentalis</i>	Ronald W. Smith	5/26/1939	N side Clark Mt.
MVZ 28501	<i>Sceloporus</i>	<i>occidentalis</i>	Ronald W. Smith	5/26/1939	N side Clark Mt.
SDNHM Z60222	<i>Sceloporus</i>	<i>occidentalis</i>	McGurt, Brian M.	June 1977	New York Mtns., Caruthers Canyon
SDNHM Z60223	<i>Sceloporus</i>	<i>occidentalis</i>	McGurt, Brian M.	7/5/1977	New York Mtns., Caruthers Canyon
MVZ 28499	<i>Sceloporus</i>	<i>occidentalis</i>	Alden H. Miller	5/20/1939	NW side Clark Mt.
MVZ 35825	<i>Sceloporus</i>	<i>occidentalis</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mtns
MVZ 35826	<i>Sceloporus</i>	<i>occidentalis</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mtns
MVZ 35827	<i>Sceloporus</i>	<i>occidentalis</i>	Milton Hildebrand	6/24/1940	Pass betw. Granite & Providence Mtns
MVZ 35828	<i>Sceloporus</i>	<i>occidentalis</i>	Milton Hildebrand	6/24/1940	Pass betw. Granite & Providence Mtns
MVZ 207860	<i>Sceloporus</i>	<i>occidentalis</i>	B. R. Moon	5/17/1987	Peak ca. 0.5 mi SE Goldstone Spring, Providence Mts.
MVZ 207861	<i>Sceloporus</i>	<i>occidentalis</i>	B. R. Moon	5/17/1987	Peak ca. 0.5 mi SE Goldstone Spring, Providence Mts.
MVZ 207862	<i>Sceloporus</i>	<i>occidentalis</i>	B. R. Moon	5/17/1987	Peak ca. 0.5 mi SE Goldstone Spring, Providence Mts.
SDNHM Z29665	<i>Sceloporus</i>	<i>occidentalis</i>	Rodgers, Tom	5/29/1938	Providence Mts., Cedar Canyon
SDNHM Z29666	<i>Sceloporus</i>	<i>occidentalis</i>	Rodgers, Tom	5/29/1938	Providence Mts., Cedar Canyon
MVZ 207863	<i>Sceloporus</i>	<i>occidentalis</i>	B. R. Moon	5/17/1987	Ridge ca. 1 mi SE Goldstone Spring, Providence Mts.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 207864	<i>Sceloporus</i>	<i>occidentalis</i>	B. R. Moon	5/17/1987	Ridge ca. 1 mi SE Goldstone Spring, Providence Mts.
MVZ 207865	<i>Sceloporus</i>	<i>occidentalis</i>	B. R. Moon	5/17/1987	Ridge ca. 1 mi SE Goldstone Spring, Providence Mts.
MVZ 28492	<i>Sceloporus</i>	<i>occidentalis</i>	Alden H. Miller	5/18/1939	SE side Clark Mt.
MVZ 28493	<i>Sceloporus</i>	<i>occidentalis</i>	Ronald W. Smith	5/18/1939	SE side Clark Mt.
MVZ 28494	<i>Sceloporus</i>	<i>occidentalis</i>	Alden H. Miller	5/18/1939	SE side Clark Mt.
MVZ 28495	<i>Sceloporus</i>	<i>occidentalis</i>	Alden H. Miller	5/18/1939	SE side Clark Mt.
MVZ 28496	<i>Sceloporus</i>	<i>occidentalis</i>	Ward C. Russell	5/19/1939	SE side Clark Mt.
MVZ 28497	<i>Sceloporus</i>	<i>occidentalis</i>	Alden H. Miller	5/20/1939	SE side Clark Mt.
MVZ 28498	<i>Sceloporus</i>	<i>occidentalis</i>	Ronald W. Smith	5/21/1939	SE side Clark Mt.
MVZ 207859	<i>Sceloporus</i>	<i>occidentalis</i>	B. R. Moon	5/6/1987	Spring 0.25 mi SE Goldstone Spring, Providence Mts.
122434	<i>Sceloporus</i>	<i>occidentalis</i>	LA Lester & TC Olmstead	4/24/1976	Upper Cottonwood Wash; 14 mi. S. 1.7 mi. W. Kelso T 8N, R 12 E, Sec 2, SE 1/4
122435	<i>Sceloporus</i>	<i>occidentalis</i>	LA Lester & TC Olmstead	4/24/1976	Upper Cottonwood Wash; 14 mi. S. 1.7 mi. W. Kelso T 8N, R 12 E, Sec 2, SE 1/4
MVZ 173040	<i>Sonora</i>	<i>semiannulata</i>	B. M. McGurty	6/12/1977	Foshay Pass
103669	<i>Sonora</i>	<i>semiannulata</i>	WC Hunter	6/7/1966	Goldstone tracking station, study plot #1
MVZ 173041	<i>Sonora</i>	<i>semiannulata</i>	B. M. McGurty	5/30/1977	New York Mts.
MVZ 173042	<i>Sonora</i>	<i>semiannulata</i>	B. M. McGurty	7/5/1977	Piute Cr.
UCR-GMR 46	<i>Tantilla</i>	<i>hobartsmithi</i>	Minden, R. L.	5/30/1978	Granite Mtns, Cottonwood Canyon T 8N, R 12E Sect. 12 NE 1/4
MVZ 228637	<i>Trimorphodon</i>	<i>biscutatus</i>	J. Robert Macey, D. Norris, T. Norris	6/15/1986	Kelso Dunes, 7.5 mi SSE (by air) Kelso T9N R12E Sec. 3 NW 1/4
MVZ 35688	<i>Uma</i>	<i>scoparia</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35689	<i>Uma</i>	<i>scoparia</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35690	<i>Uma</i>	<i>scoparia</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35691	<i>Uma</i>	<i>scoparia</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35692	<i>Uma</i>	<i>scoparia</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35693	<i>Uma</i>	<i>scoparia</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35694	<i>Uma</i>	<i>scoparia</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35695	<i>Uma</i>	<i>scoparia</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35696	<i>Uma</i>	<i>scoparia</i>	David H. Johnson	6/19/1940	2.5 mi SW Kelso
MVZ 35697	<i>Uma</i>	<i>scoparia</i>	David H. Johnson	6/21/1940	2.5 mi SW Kelso
MVZ 35698	<i>Uma</i>	<i>scoparia</i>	David H. Johnson	6/21/1940	2.5 mi SW Kelso
MVZ 35699	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/21/1940	2.5 mi SW Kelso
MVZ 35700	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/21/1940	2.5 mi SW Kelso
MVZ 35701	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/21/1940	2.5 mi SW Kelso
MVZ 35702	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35703	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35704	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35705	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35706	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35707	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35708	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35709	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35710	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35711	<i>Uma</i>	<i>scoparia</i>	Milton Hildebrand	6/19/1940	2.5 mi SW Kelso
MVZ 35712	<i>Uma</i>	<i>scoparia</i>	Harvey I. Fisher	6/22/1940	2.5 mi SW Kelso
MVZ 35713	<i>Uma</i>	<i>scoparia</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35714	<i>Uma</i>	<i>scoparia</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35715	<i>Uma</i>	<i>scoparia</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35716	<i>Uma</i>	<i>scoparia</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35717	<i>Uma</i>	<i>scoparia</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
MVZ 35718	<i>Uma</i>	<i>scoparia</i>	Harvey I. Fisher	6/20/1940	2.5 mi SW Kelso
122437	<i>Uma</i>	<i>scoparia</i>	LA Lester, TC Olmstead	4/19/1976	9 mi. S, 4 mi. W. Kelso
122438	<i>Uma</i>	<i>scoparia</i>	LA Lester, TC Olmstead	4/19/1976	9 mi. S, 4 mi. W. Kelso

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
122439	<i>Uma</i>	<i>scoparia</i>	LA Lester, TC Olmstead	4/19/1976	9 mi. S, 4 mi. W. Kelso
122440	<i>Uma</i>	<i>scoparia</i>	LA Lester, TC Olmstead	4/19/1976	9.2 mi. S, 5.1 mi. W. Kelso
122441	<i>Uma</i>	<i>scoparia</i>	LA Lester, TC Olmstead	4/19/1976	9.2 mi. S, 5.1 mi. W. Kelso
122442	<i>Uma</i>	<i>scoparia</i>	LA Lester, TC Olmstead	4/19/1976	9.2 mi. S, 5.1 mi. W. Kelso
127276	<i>Uma</i>	<i>scoparia</i>	D A & M B Ruggles	4/26/1974	ca 2 mi S Kelso on kelbakan
127277	<i>Uma</i>	<i>scoparia</i>	D A & M B Ruggles	4/26/1974	ca 2 mi S Kelso on kelbakan
109414	<i>Uma</i>	<i>scoparia</i>	DA & MB Ruggles	4/26/1968	ca. 2 mi. S Kelso on Kelbaker Rd.
19572	<i>Uma</i>	<i>scoparia</i>	Norris	5/11/1949	Devil's Playground; E. Soda Lake
19573	<i>Uma</i>	<i>scoparia</i>	Norris	5/11/1949	Devil's Playground; E. Soda Lake
19580	<i>Uma</i>	<i>scoparia</i>	Mosauer	5/4/1935	Dunes near Kelso
19581	<i>Uma</i>	<i>scoparia</i>	Mosauer	5/4/1935	Dunes near Kelso
19582	<i>Uma</i>	<i>scoparia</i>	Mosauer	5/4/1935	Dunes near Kelso
19583	<i>Uma</i>	<i>scoparia</i>	Mosauer	5/4/1935	Dunes near Kelso
19584	<i>Uma</i>	<i>scoparia</i>	Norris	5/12/1949	Dunes near Kelso
97722	<i>Uma</i>	<i>scoparia</i>	T.M. Peters	4/11/1959	E. slope Kelso Dunes, 9 mi S.W. Kelso
UCR-GMR 12	<i>Uma</i>	<i>scoparia</i>	Minden, R. L.	5/20/1978	Granite Mountains, 5 miles west on power corridor from Kelbaker 9N - 12E Sect 9 SW 1/4
MVZ 199441	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz , Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199442	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199443	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199444	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199445	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz , Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199446	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199447	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199448	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199449	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199452	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199453	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199454	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199455	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199456	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199457	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199458	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199459	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199460	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 199461	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
MVZ 214786	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214833	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214834	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 214835	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214836	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214837	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214838	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214839	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214840	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214841	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214842	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214844	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214845	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214846	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214847	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214848	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	10/1/1983	Kelso Dunes
MVZ 214932	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz, Jonathan H. Carothers	10/1/1983	Kelso Dunes
SDNHM Z57033	<i>Uma</i>	<i>scoparia</i>	Garstka, Bill	5/23/1970	Kelso Dunes
97723	<i>Uma</i>	<i>scoparia</i>	R.D. Knox, Jr.	3/27/1960	Kelso Dunes, 12.4 mi S. Kelso
97724	<i>Uma</i>	<i>scoparia</i>	R.D. Knox, Jr.	3/27/1960	Kelso Dunes, 12.4 mi S. Kelso
126235	<i>Uma</i>	<i>scoparia</i>	R.L. Bezy and JW Wright	7/1/1977	Kelso Dunes, 9.0 mi S., 3.0 mi W Kelso,
126236	<i>Uma</i>	<i>scoparia</i>	R.L. Bezy and JW Wright	7/1/1977	Kelso Dunes, 9.0 mi S., 3.0 mi W Kelso,
126237	<i>Uma</i>	<i>scoparia</i>	R.L. Bezy and JW Wright	7/1/1977	Kelso Dunes, 9.0 mi S., 3.0 mi W Kelso,
127278	<i>Uma</i>	<i>scoparia</i>	L A Lester, & T Olmstead	4/19/1976	Kelso Dunes; 9.2 mi S, 5.1 mi W Kelso, T9N, R12E Sec8 SE 1/2
122443	<i>Uma</i>	<i>scoparia</i>	LA Lester & TC Olmstead	4/20/1976	Kelso Dunes; 9.2 mi. S, 5.1 mi. W Kelso T 9N, R 12E, Sec 8, SE 1/4
52741	<i>Uma</i>	<i>scoparia</i>	Knox	4/12/1959	Kelso Dunes, 7 mi. S, 4 mi. W Kelso
52740	<i>Uma</i>	<i>scoparia</i>	Welbourn	4/29/1967	Kelso Sand Dunes, 8 mi. SE Kelso
52742	<i>Uma</i>	<i>scoparia</i>	Welbourn	4/29/1967	Kelso Sand Dunes, 8 mi. SE Kelso
52743	<i>Uma</i>	<i>scoparia</i>	Welbourn	4/29/1967	Kelso Sand Dunes, 8 mi. SE Kelso
SDNHM Z49031	<i>Uma</i>	<i>scoparia</i>	Dr. Cox, et.al.	5/4/1968	Kelso sand dunes, Mojave Desert
137924	<i>Uma</i>	<i>scoparia</i>	C Rau	4/30/1977	Kelso Sand Dunes, southern end
YPM 10369	<i>Uma</i>	<i>scoparia</i>	Marc Gauthier	5/21/2001	N34.895700 W115.703800
YPM 10388	<i>Uma</i>	<i>scoparia</i>	Marc Gauthier	5/21/2001	N34.895700 W115.703800
122436	<i>Uma</i>	<i>scoparia</i>	LA Lester & TC Olmstead	4/29/1976	Old Dad Mtn; 3.7 mi. N, 12.3 mi. W. Kelso T 11N, R 10E, Sec 1 NW 1/4
MVZ 214777	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	6/17/1983	S side Kelso Dunes
MVZ 214778	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	6/17/1983	S side Kelso Dunes
MVZ 214779	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	6/17/1983	S side Kelso Dunes
MVZ 214780	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	6/17/1983	S side Kelso Dunes
MVZ 214781	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	6/17/1983	S side Kelso Dunes
MVZ 214782	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	6/17/1983	S side Kelso Dunes
MVZ 214783	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	6/17/1983	S side Kelso Dunes
MVZ 214784	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	6/17/1983	S side Kelso Dunes
MVZ 214785	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	6/17/1983	S side Kelso Dunes
MVZ 214788	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	7/18/1986	SE end Kelso Dunes
MVZ 214789	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	7/18/1986	SE end Kelso Dunes
MVZ 214790	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	7/18/1986	SE end Kelso Dunes
MVZ 214791	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	7/18/1986	SE end Kelso Dunes
MVZ 214792	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	7/18/1986	SE end Kelso Dunes
MVZ 214793	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	7/19/1986	SE end Kelso Dunes
MVZ 214794	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	7/19/1986	SE end Kelso Dunes
MVZ 214795	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	7/19/1986	SE end Kelso Dunes
MVZ 214796	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	7/19/1986	SE end Kelso Dunes
MVZ 214797	<i>Uma</i>	<i>scoparia</i>	Kevin de Queiroz	7/19/1986	SE end Kelso Dunes
MVZ 161518	<i>Uma</i>	<i>scoparia</i>	Robert L. Seib	12-13 JUN 1978	vicinity of Kelso Dunes

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 161519	<i>Uma</i>	<i>scoparia</i>	Robert L. Seib	12-13 JUN 1978	vicinity of Kelso Dunes
MVZ 161520	<i>Uma</i>	<i>scoparia</i>	Robert L. Seib	12-13 JUN 1978	vicinity of Kelso Dunes
MVZ 161521	<i>Uma</i>	<i>scoparia</i>	Robert L. Seib	12-13 JUN 1978	vicinity of Kelso Dunes
MVZ 161522	<i>Uma</i>	<i>scoparia</i>	Robert L. Seib	12-13 JUN 1978	vicinity of Kelso Dunes
MVZ 35719	<i>Urosaurus</i>	<i>graciosus</i>	Harvey I. Fisher	6/19/1940	2.5 mi SW Kelso
MVZ 35720	<i>Urosaurus</i>	<i>graciosus</i>	Harvey I. Fisher	6/22/1940	2.5 mi SW Kelso
MVZ 35721	<i>Urosaurus</i>	<i>graciosus</i>	Milton Hildebrand	6/21/1940	2.5 mi SW Kelso
UCR-GMR 9	<i>Urosaurus</i>	<i>graciosus</i>	Minden, R. L.	5/20/1978	Granite Mountains, Bull Canyon Wash T. 9N R. 12E Sect. 20
CAS 183158	<i>Urosaurus</i>	<i>graciosus</i>	R. Macey	6/16/1991	Kelbaker Rd, 10-15 mi ESE of Hwy 15 at Baker
MVZ 207842	<i>Urosaurus</i>	<i>graciosus</i>	B. R. Moon	5/14/1987	Kelbaker Rd., 1.8 mi N of Vulcan Mine Rd.
MVZ 172910	<i>Urosaurus</i>	<i>graciosus</i>	B. M. McGuerty	7/5/1977	Piute Creek
MVZ 172911	<i>Urosaurus</i>	<i>graciosus</i>	B. M. McGuerty	7/5/1977	Piute Creek
MVZ 172936	<i>Uta</i>	<i>stansburiana</i>	C. Markmann, J.V.M.	6/24/1978	1.5 mi W Green's Well
122446	<i>Uta</i>	<i>stansburiana</i>	LA Lester, TC Olmstead	4/20/1976	11 mi. S, 1 mi. W. Kelso
99145	<i>Uta</i>	<i>stansburiana</i>	JC Geest	3/26/1960	12.7 mi from Kelso at campsite area
MVZ 26374	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/4/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 26375	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/4/1938	2 mi ESE Rock Spr., Lanfair Valley
MVZ 26342	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/13/1938	2 mi NNE Cima
MVZ 26343	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/13/1938	2 mi NNE Cima
MVZ 26344	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/13/1938	2 mi NNE Cima
MVZ 26345	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/13/1938	2 mi NNE Cima
MVZ 26346	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/13/1938	2 mi NNE Cima
MVZ 26347	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/13/1938	2 mi NNE Cima
MVZ 26348	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/13/1938	2 mi NNE Cima
MVZ 26349	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/13/1938	2 mi NNE Cima
MVZ 26350	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/13/1938	2 mi NNE Cima
MVZ 26351	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/14/1938	2 mi NNE Cima
MVZ 25359	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	12/31/1937	5 mi NE Granite Well, Providence Mts.
99146	<i>Uta</i>	<i>stansburiana</i>	JC Geest	3/27/1960	7 mi S Kelso
122445	<i>Uta</i>	<i>stansburiana</i>	LA Lester, TC Olmstead	4/19/1976	9.2 mi. S, 5.1 mi. W. Kelso
99053	<i>Uta</i>	<i>stansburiana</i>	JC Geest	3/26/1960	at Kaiser Vulcan Mine area
MVZ 172925	<i>Uta</i>	<i>stansburiana</i>	B. M. McGuerty	5/30/1978	Caruthers Canyon
MVZ 172926	<i>Uta</i>	<i>stansburiana</i>	B. M. McGuerty	6/4/1978	Caruthers Canyon
MVZ 172927	<i>Uta</i>	<i>stansburiana</i>	B. M. McGuerty	6/4/1978	Caruthers Canyon
MVZ 172928	<i>Uta</i>	<i>stansburiana</i>	B. M. McGuerty	6/4/1978	Caruthers Canyon
MVZ 172929	<i>Uta</i>	<i>stansburiana</i>	B. M. McGuerty	7/13/1977	Cedar Canyon
MVZ 26352	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/22/1938	Cedar Canyon, Providence Mts.
MVZ 26353	<i>Uta</i>	<i>stansburiana</i>	David H. Johnson	5/22/1938	Cedar Canyon, Providence Mts.
MVZ 26354	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/24/1938	Cedar Canyon, Providence Mts.
MVZ 26355	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/24/1938	Cedar Canyon, Providence Mts.
MVZ 26356	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26357	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26358	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26359	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26360	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26361	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26362	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26363	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26364	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26365	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26366	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26367	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/28/1938	Cedar Canyon, Providence Mts.
MVZ 26368	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	5/29/1938	Cedar Canyon, Providence Mts.
MVZ 26369	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/1/1938	Cedar Canyon, Providence Mts.
MVZ 26370	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/1/1938	Cedar Canyon, Providence Mts.
MVZ 26371	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/3/1938	Cedar Canyon, Providence Mts.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 26372	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/3/1938	Cedar Canyon, Providence Mts.
MVZ 26373	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/4/1938	Cedar Canyon, Providence Mts.
MVZ 172930	<i>Uta</i>	<i>stansburiana</i>	C. Markmann, J.V.M.	7/7/1978	Cima, 8 mi N of Int. 15
SDNHM Z12991	<i>Uta</i>	<i>stansburiana</i>	Searl, Clyde	7/18/1929	Clark Mountains, 84 mi E Barstow
SDNHM Z12992	<i>Uta</i>	<i>stansburiana</i>	Searl, Clyde	7/18/1929	Clark Mountains, 84 mi E Barstow
SDNHM Z12993	<i>Uta</i>	<i>stansburiana</i>	Searl, Clyde	7/18/1929	Clark Mountains, 84 mi E Barstow
SDNHM Z12994	<i>Uta</i>	<i>stansburiana</i>	Searl, Clyde	7/18/1929	Clark Mountains, 84 mi E Barstow
SDNHM Z12995	<i>Uta</i>	<i>stansburiana</i>	Searl, Clyde	7/18/1929	Clark Mountains, 84 mi E Barstow
SDNHM Z12996	<i>Uta</i>	<i>stansburiana</i>	Searl, Clyde	7/18/1929	Clark Mountains, 84 mi E Barstow
SDNHM Z12997	<i>Uta</i>	<i>stansburiana</i>	Searl, Clyde	7/18/1929	Clark Mountains, 84 mi E Barstow
SDNHM Z12998	<i>Uta</i>	<i>stansburiana</i>	Searl, Clyde	7/18/1929	Clark Mountains, 84 mi E Barstow
SDNHM Z12999	<i>Uta</i>	<i>stansburiana</i>	Searl, Clyde	7/18/1929	Clark Mountains, 84 mi E Barstow
MVZ 172931	<i>Uta</i>	<i>stansburiana</i>	C. Markmann, J.V.M.	9/2/1978	Clark Mt., North Face
MVZ 26376	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26377	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26378	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/7/1938	Colton Well, Providence Mts.
MVZ 26379	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/8/1938	Colton Well, Providence Mts.
24122	<i>Uta</i>	<i>stansburiana</i>	Cowles	4/26/1950	Cottonwood Springs, Granite Mtns
24123	<i>Uta</i>	<i>stansburiana</i>	Cowles	4/26/1950	Cottonwood Springs, Granite Mtns
24124	<i>Uta</i>	<i>stansburiana</i>	Cowles	4/26/1950	Dorner's Camp, Granite Mountains
24125	<i>Uta</i>	<i>stansburiana</i>	Cowles	4/26/1950	Dorner's Camp, Granite Mountains
MVZ 146248	<i>Uta</i>	<i>stansburiana</i>	E. Wessman	5/11/1976	Fenner Valley [Powerline road]
MVZ 28467	<i>Uta</i>	<i>stansburiana</i>	Monroe D. Bryant	5/21/1939	Flat SE Clark Mt.
MVZ 28468	<i>Uta</i>	<i>stansburiana</i>	Monroe D. Bryant	5/22/1939	Flat SE Clark Mt.
MVZ 28469	<i>Uta</i>	<i>stansburiana</i>	Monroe D. Bryant	5/22/1939	Flat SE Clark Mt.
MVZ 28470	<i>Uta</i>	<i>stansburiana</i>	Monroe D. Bryant	5/22/1939	Flat SE Clark Mt.
CAS 158231	<i>Uta</i>	<i>stansburiana</i>	J.V. Vindum	4/5/1985	Fort Soda, ca. 5 mi SSW of Baker
MVZ 172933	<i>Uta</i>	<i>stansburiana</i>	B. M. McGurty	5/27/1977	Foshay Pass
MVZ 172934	<i>Uta</i>	<i>stansburiana</i>	B. M. McGurty	5/27/1977	Foshay Pass
MVZ 172935	<i>Uta</i>	<i>stansburiana</i>	B. M. McGurty	7/13/1977	Foshay Pass
67320	<i>Uta</i>	<i>stansburiana</i>	R.G. Crippen	5/30/1970	Fourth of July Cyn., 9.5 mi E Cima
67321	<i>Uta</i>	<i>stansburiana</i>	R.G. Crippen	5/30/1970	Fourth of July Cyn., 9.5 mi E Cima
UCR-GMR 10	<i>Uta</i>	<i>stansburiana</i>	Minden, R. L.	5/20/1978	Granite Mountains, Dripping Spring 8N 13 E Sect. 17
23395	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23396	<i>Uta</i>	<i>stansburiana</i>	Porter	7/17/1965	Granite Mtn.
23397	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23398	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23399	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23400	<i>Uta</i>	<i>stansburiana</i>	Porter	7/17/1965	Granite Mtn.
23401	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23402	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23403	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23404	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23405	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23406	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23407	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23408	<i>Uta</i>	<i>stansburiana</i>			Granite Mtn.
23409	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23410	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23411	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23412	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23413	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23414	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23415	<i>Uta</i>	<i>stansburiana</i>	Porter	7/17/1965	Granite Mtn.
23416	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23417	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
23418	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn., Willow Springs
23419	<i>Uta</i>	<i>stansburiana</i>	Porter	7/17/1965	Granite Mtn.
23420	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23421	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23422	<i>Uta</i>	<i>stansburiana</i>	Porter	7/17/1965	Granite Mtn.
23423	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23424	<i>Uta</i>	<i>stansburiana</i>	Porter	7/17/1965	Granite Mtn.
23425	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23426	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23427	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23428	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23429	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23430	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23431	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23432	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23433	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23434	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23435	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23436	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23438	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23439	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23440	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23441	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23442	<i>Uta</i>	<i>stansburiana</i>	Ahearu	4/24/1965	Granite Mtn.
23443	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23444	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23445	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23446	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23447	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23448	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23449	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23450	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23451	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23452	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23453	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23454	<i>Uta</i>	<i>stansburiana</i>			Granite Mtn.
23455	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23456	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23457	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23458	<i>Uta</i>	<i>stansburiana</i>	Ahearn	4/24/1965	Granite Mtn.
23459	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23460	<i>Uta</i>	<i>stansburiana</i>	Ahearn	4/24/1965	Granite Mtn.
23461	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23462	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23463	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23464	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23465	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23466	<i>Uta</i>	<i>stansburiana</i>	Porter	7/17/1965	Granite Mtn.
23467	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23468	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23469	<i>Uta</i>	<i>stansburiana</i>	Ahearn	4/24/1965	Granite Mtn.
23470	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23471	<i>Uta</i>	<i>stansburiana</i>	Ahearn	4/24/1965	Granite Mtn.
23472	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23473	<i>Uta</i>	<i>stansburiana</i>	Porter	7/17/1965	Granite Mtn.
23474	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23475	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23476	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
23477	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtn.
23478	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23479	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23480	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtn.
23055	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtns
23059	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtns
23064	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtns
23003	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtns.
23016	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtns.
23017	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtns.
23021	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1964	Granite Mtns.
23025	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtns.
23030	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtns.
23041	<i>Uta</i>	<i>stansburiana</i>	Porter	1/12/1965	Granite Mtns.
23048	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtns.
23068	<i>Uta</i>	<i>stansburiana</i>	Porter	6/12/1965	Granite Mtns.
23239	<i>Uta</i>	<i>stansburiana</i>	Porter	5/15/1965	Granite Mtns.; Spa Line near Camp
62504	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62505	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62506	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62507	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62508	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62509	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62510	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62511	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62512	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62513	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62514	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62515	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62516	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62517	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62518	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62519	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62520	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62521	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62522	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62523	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62524	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62525	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62526	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62527	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62528	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
62529	<i>Uta</i>	<i>stansburiana</i>	K.S. Norris	9/18/1965	Granite Mts.
MVZ 214458	<i>Uta</i>	<i>stansburiana</i>	Claudia A. Luke	4/1/1986	Granite Mts.
MVZ 214483	<i>Uta</i>	<i>stansburiana</i>	Claudia A. Luke	25-28 April 1986	Granite Mts.
MVZ 214489	<i>Uta</i>	<i>stansburiana</i>	Claudia A. Luke		Granite Mts.
MVZ 206237	<i>Uta</i>	<i>stansburiana</i>	A. D. Driscoll	4/27/1986	Granite Mts. Plateau, Granite Mts.
MVZ 206238	<i>Uta</i>	<i>stansburiana</i>	A. D. Driscoll	5/10/1986	Granite Mts. Plateau, Granite Mts.
MVZ 206239	<i>Uta</i>	<i>stansburiana</i>	A. D. Driscoll	5/10/1986	Granite Mts. Plateau, Granite Mts.
MVZ 206240	<i>Uta</i>	<i>stansburiana</i>	A. D. Driscoll	5/10/1986	Granite Mts. Plateau, Granite Mts.
MVZ 172939	<i>Uta</i>	<i>stansburiana</i>	C. Markmann, J.V.M.	6/2/1978	Ivanpah Spr.
99144	<i>Uta</i>	<i>stansburiana</i>	M Knox	4/12/1959	Kelso Dunes, 7 mi S, 4 mi W Kelso
YPM 10484	<i>Uta</i>	<i>stansburiana</i>	Jacques A. Gauthier	5/20/2001	N35.130500 W115.43600
YPM 10441	<i>Uta</i>	<i>stansburiana</i>	Jacques A. Gauthier	5/22/2001	N35.130500 W115.43600
MVZ 28448	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/26/1939	N side Clark Mt.
MVZ 28449	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/27/1939	N side Clark Mt.
MVZ 28450	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/27/1939	N side Clark Mt.
MVZ 28451	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/27/1939	N side Clark Mt.

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 28452	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/27/1939	N side Clark Mt.
MVZ 28465	<i>Uta</i>	<i>stansburiana</i>	Ronald W. Smith	5/26/1939	N side Clark Mt.
MVZ 28466	<i>Uta</i>	<i>stansburiana</i>	Ronald W. Smith	5/26/1939	N side Clark Mt.
SDNHM Z60227	<i>Uta</i>	<i>stansburiana</i>	McGurty, Brian M.	6/4/1977	New York Mtns., Caruthers Canyon
UCR-GMR 11	<i>Uta</i>	<i>stansburiana</i>	Nagy, Ken	5/27/1998	Norris Camp, Sweeney Granite Mountains Desert Research Center, basement steps
122444	<i>Uta</i>	<i>stansburiana</i>	LA Lester & TC Olmstead	4/28/1976	Old Dad Mtn; 4.3 mi. N, 11.3 mi. W. Kelso T 12N, R 11E, Sec 31, SW 1/4
MVZ 41640	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	10/2/1945	Pachalka Spr., W side Clark Mt.
MVZ 26380	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/11/1938	Pass betw. Granite & Providence Mtns
MVZ 26381	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/11/1938	Pass betw. Granite & Providence Mtns
MVZ 26382	<i>Uta</i>	<i>stansburiana</i>	Thomas L. Rodgers	6/11/1938	Pass betw. Granite & Providence Mtns
MVZ 35722	<i>Uta</i>	<i>stansburiana</i>	Harvey I. Fisher (#279)	6/24/1940	Pass betw. Granite & Providence Mtns
MVZ 35723	<i>Uta</i>	<i>stansburiana</i>	Milton Hildebrand	6/23/1940	Pass betw. Granite & Providence Mtns
MVZ 35724	<i>Uta</i>	<i>stansburiana</i>	Milton Hildebrand	6/24/1940	Pass betw. Granite & Providence Mtns
MVZ 35725	<i>Uta</i>	<i>stansburiana</i>	Milton Hildebrand	6/25/1940	Pass betw. Granite & Providence Mtns
MVZ 207846	<i>Uta</i>	<i>stansburiana</i>	B. R. Moon	5/17/1987	Peak, ca. 0.5 mi SE Goldstone Spring, Providence Mts.
MVZ 207845	<i>Uta</i>	<i>stansburiana</i>	B. R. Moon	4/20/1987	Pipeline Rd., ca. 0.25 mi W Foshay Pass, Providence Mts..
MVZ 172940	<i>Uta</i>	<i>stansburiana</i>	B. M. McGurty	6/5/1977	Piute Cr.
MVZ 172941	<i>Uta</i>	<i>stansburiana</i>	B. M. McGurty	6/5/1977	Piute Cr.
MVZ 172942	<i>Uta</i>	<i>stansburiana</i>	B. M. McGurty	6/5/1977	Piute Cr.
SDNHM Z60226	<i>Uta</i>	<i>stansburiana</i>	McGurty, Brian M.	6/5/1977	Piute Mtns., Piute Creek
SDNHM Z60228	<i>Uta</i>	<i>stansburiana</i>	McGurty, Brian M.	6/5/1977	Piute Mtns., Piute Creek
SDNHM Z60224	<i>Uta</i>	<i>stansburiana</i>	McGurty, Brian M.	7/5/1977	Piute Mtns., Piute Creek
SDNHM Z60225	<i>Uta</i>	<i>stansburiana</i>	McGurty, Brian M.	7/5/1977	Piute Mtns., Piute Creek
53020	<i>Uta</i>	<i>stansburiana</i>	Knox	4/11/1959	Providence Mts., Kaiser Ulean Iron Mines, 9 mi. S Kelso
SDNHM Z29669	<i>Uta</i>	<i>stansburiana</i>	Rodgers, Tom	4/26/1938	Providence Mts., Cedar Canyon
SDNHM Z29670	<i>Uta</i>	<i>stansburiana</i>	Rodgers, Tom	6/10/1938	Providence Mts., Mitchell's Caverns
MVZ 28453	<i>Uta</i>	<i>stansburiana</i>	Alden H. Miller	5/21/1939	S side Clark Mt.
MVZ 28454	<i>Uta</i>	<i>stansburiana</i>	Alden H. Miller	5/21/1939	S side Clark Mt.
MVZ 28455	<i>Uta</i>	<i>stansburiana</i>	Alden H. Miller	5/21/1939	S side Clark Mt.
MVZ 28456	<i>Uta</i>	<i>stansburiana</i>	Alden H. Miller	5/21/1939	S side Clark Mt.
MVZ 207843	<i>Uta</i>	<i>stansburiana</i>	B. R. Moon	4/17/1987	S side Vulcan Mine Rd., ca. 2.25 mi E Kelbaker Rd., Providence Mts.
MVZ 207844	<i>Uta</i>	<i>stansburiana</i>	B. R. Moon	4/17/1987	S side Vulcan Mine Rd., ca. 2.25 mi E Kelbaker Rd., Providence Mts.
MVZ 28439	<i>Uta</i>	<i>stansburiana</i>	Aldo S. Leopold	5/19/1939	SE side Clark Mt.
MVZ 28440	<i>Uta</i>	<i>stansburiana</i>	Aldo S. Leopold	5/20/1939	SE side Clark Mt.
MVZ 28441	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/19/1939	SE side Clark Mt.
MVZ 28442	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/19/1939	SE side Clark Mt.
MVZ 28443	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/20/1939	SE side Clark Mt.
MVZ 28444	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/21/1939	SE side Clark Mt.
MVZ 28445	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/21/1939	SE side Clark Mt.
MVZ 28446	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/21/1939	SE side Clark Mt.
MVZ 28447	<i>Uta</i>	<i>stansburiana</i>	Ward C. Russell	5/22/1939	SE side Clark Mt.
MVZ 28457	<i>Uta</i>	<i>stansburiana</i>	Alden H. Miller	5/22/1939	SE side Clark Mt.
MVZ 28458	<i>Uta</i>	<i>stansburiana</i>	Alden H. Miller	5/22/1939	SE side Clark Mt.
MVZ 28459	<i>Uta</i>	<i>stansburiana</i>	Alden H. Miller	5/22/1939	SE side Clark Mt.
MVZ 28460	<i>Uta</i>	<i>stansburiana</i>	Alden H. Miller	5/22/1939	SE side Clark Mt.
MVZ 28461	<i>Uta</i>	<i>stansburiana</i>	Ronald W. Smith	5/21/1939	SE side Clark Mt.
MVZ 28462	<i>Uta</i>	<i>stansburiana</i>	Ronald W. Smith	5/21/1939	SE side Clark Mt.
MVZ 28463	<i>Uta</i>	<i>stansburiana</i>	Ronald W. Smith	5/22/1939	SE side Clark Mt.
MVZ 28464	<i>Uta</i>	<i>stansburiana</i>	Ronald W. Smith	5/22/1939	SE side Clark Mt.
MVZ 146249	<i>Uta</i>	<i>stansburiana</i>	E. Wessman	5/12/1976	W Ivanpah Valley

**Appendix C, continued.**

Catalog Number	Genus	Species	Collector	Date	Locality
MVZ 172978	<i>Xantusia</i>	<i>vigilis</i>	J.V.M.	5/26/1978	0.5 mi E Ivanpah Spr.
MVZ 172975	<i>Xantusia</i>	<i>vigilis</i>	J.V.M.	8/12/1978	1 mi W Green's Well
MVZ 215606	<i>Xantusia</i>	<i>vigilis</i>	Harry W. Greene	5/20/1987	1.0 mi E Vulcan Mine, Providence Mts.
36582	<i>Xantusia</i>	<i>vigilis</i>	Lester & Northern	5/23/1967	6.5 mi S, 6 mi E Cima
36583	<i>Xantusia</i>	<i>vigilis</i>	Lester & Northern	5/23/1967	6.5 mi S, 6 mi E Cima
MVZ 207877	<i>Xantusia</i>	<i>vigilis</i>	B. R. Moon	4/8/1987	Bonanza King Mine, Providence Mts.
MVZ 207878	<i>Xantusia</i>	<i>vigilis</i>	B. R. Moon	4/8/1987	Bonanza King Mine, Providence Mts.
MVZ 172974	<i>Xantusia</i>	<i>vigilis</i>	B. M. McGurty	6/24/1977	Caruthers Canyon
MVZ 26630	<i>Xantusia</i>	<i>vigilis</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26631	<i>Xantusia</i>	<i>vigilis</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26632	<i>Xantusia</i>	<i>vigilis</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26633	<i>Xantusia</i>	<i>vigilis</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
MVZ 26634	<i>Xantusia</i>	<i>vigilis</i>	Thomas L. Rodgers	5/26/1938	Cedar Canyon, Providence Mts.
SDNHM Z07494	<i>Xantusia</i>	<i>vigilis</i>	Jaeger, Edmund	3/6/1932	Cima
SDNHM Z07495	<i>Xantusia</i>	<i>vigilis</i>	Jaeger, Edmund	3/6/1932	Cima
SDNHM Z07496	<i>Xantusia</i>	<i>vigilis</i>	Jaeger, Edmund	3/6/1932	Cima
14590	<i>Xantusia</i>	<i>vigilis</i>	B. H. Brattstrom	9/19/1952	Clark Mountains, Mohawk Mine, just N Hwy 466
14591	<i>Xantusia</i>	<i>vigilis</i>	B. H. Brattstrom	9/19/1952	Clark Mountains, Mohawk Mine, just N Hwy 466
14592	<i>Xantusia</i>	<i>vigilis</i>	B. H. Brattstrom	9/19/1952	Clark Mountains, Mohawk Mine, just N Hwy 466
SDNHM Z29021	<i>Xantusia</i>	<i>vigilis</i>	Klauber, L. M. and C. B. Perkins	6/16/1938 (date preserved)	Clark Mt. Station
SDNHM Z29022	<i>Xantusia</i>	<i>vigilis</i>	Klauber, L. M. and C. B. Perkins	6/16/1938	Clark Mt. Station
SDNHM Z29023	<i>Xantusia</i>	<i>vigilis</i>	Klauber, L. M. and C. B. Perkins	6/16/1938	Clark Mt. Station
SDNHM Z29024	<i>Xantusia</i>	<i>vigilis</i>	Klauber, L. M. and C. B. Perkins	6/16/1938	Clark Mt. Station
67319	<i>Xantusia</i>	<i>vigilis</i>	R.G. Crippen	5/30/1970	Fourth of July Cyn., 9.5 mi E Cima
UCR-GMR 2	<i>Xantusia</i>	<i>vigilis</i>	Minden, R. L.	4/28/1978	Granite Mountains, Cottonwood Wash T. 8N R. 12E Sect. 6 NE 1/4
23240	<i>Xantusia</i>	<i>vigilis</i>	Porter	5/15/1965	Granite Mtns.
23241	<i>Xantusia</i>	<i>vigilis</i>	Porter	5/15/1965	Granite Mtns.
23242	<i>Xantusia</i>	<i>vigilis</i>	Porter	5/15/1965	Granite Mtns.
23243	<i>Xantusia</i>	<i>vigilis</i>	Porter	5/15/1965	Granite Mtns.
62262	<i>Xantusia</i>	<i>vigilis</i>	K.S. Norris	9/18/1965	Granite Mtns.
MVZ 206241	<i>Xantusia</i>	<i>vigilis</i>	A. D. Driscoll	5/4/1986	Granite Mts. Plateau, Granite Mts.
MVZ 206242	<i>Xantusia</i>	<i>vigilis</i>	A. D. Driscoll	7/22/1986	Granite Mts. Plateau, Granite Mts.
MVZ 206243	<i>Xantusia</i>	<i>vigilis</i>	A. D. Driscoll	7/22/1986	Granite Mts. Plateau, Granite Mts.
MVZ 206244	<i>Xantusia</i>	<i>vigilis</i>	A. D. Driscoll	7/22/1986	Granite Mts. Plateau, Granite Mts.
SDNHM Z49288	<i>Xantusia</i>	<i>vigilis</i>	Dr. Cox, et.al.	5/5/1968	Granite Pass
SDNHM Z49289	<i>Xantusia</i>	<i>vigilis</i>	Dr. Cox, et.al.	5/5/1968	Granite Pass
SDNHM Z49290	<i>Xantusia</i>	<i>vigilis</i>	Dr. Cox, et.al.	5/5/1968	Granite Pass
SDNHM Z49291	<i>Xantusia</i>	<i>vigilis</i>	Dr. Cox, et.al.	5/5/1968	Granite Pass
MVZ 172977	<i>Xantusia</i>	<i>vigilis</i>	J.V.M.	7/28/1978	Ivanpah Spr.
MVZ 207879	<i>Xantusia</i>	<i>vigilis</i>	B. R. Moon	5/14/1987	mouth Bonanza King Mine, Providence Mts.
MVZ 207880	<i>Xantusia</i>	<i>vigilis</i>	B. R. Moon	5/14/1987	mouth Bonanza King Mine, Providence Mts.
MVZ 172981	<i>Xantusia</i>	<i>vigilis</i>	B. M. McGurty	6/5/1977	Piute Cr.
MVZ 172982	<i>Xantusia</i>	<i>vigilis</i>	B. M. McGurty	6/5/1977	Piute Cr.
SDNHM Z29668	<i>Xantusia</i>	<i>vigilis</i>	Rodgers, Tom	4/26/1938	Providence Mts., Cedar Canyon
MVZ 28562	<i>Xantusia</i>	<i>vigilis</i>	Alden H. Miller	5/22/1939	SE side of Clark Mt.
UCR-GMR 222	<i>Xantusia</i>	<i>vigilis</i>	Alsbach,L.D.	4/16/2003	Vicinity of White Fang
MVZ 207881	<i>Xantusia</i>	<i>vigilis</i>	B. R. Moon	5/29/1987	Vulcan Mine area, Providence Mts.

**Appendix D.** Amphibians and reptiles documented from priority sampling areas at Mojave National Preserve, based on previous studies, museum specimen data, and present survey results.

Clark Mountain Area	Piute Range (excluding Piute Creek)	Piute Creek Area	Cornfield Spring Area
Red-spotted Toad	Long-nosed Leopard Lizard	Red-spotted Toad	Red-spotted Toad
Desert Tortoise	Zebra-tailed Lizard	Desert Tortoise (nearby)	Desert Tortoise
Western Banded Gecko	Desert Spiny Lizard	Western Banded Gecko	Great Basin Collared Lizard
Desert Iguana	Side-blotched Lizard	Desert Iguana	Desert Spiny Lizard
Common Chuckwalla	Western Whiptail	Great Basin Collared Lizard	Side-blotched Lizard
Great Basin Collared Lizard	Western Shovel-nosed Snake	Long-nosed Leopard Lizard (nearby)	Desert Horned Lizard
Long-nosed Leopard Lizard	Coachwhip	Zebra-tailed Lizard	Gilbert's Skink
Zebra-tailed Lizard		Desert Spiny Lizard	Western Whiptail
Desert Spiny Lizard		Side-blotched Lizard	Rosy Boa
Western Fence Lizard		Long-tailed Brush Lizard	Coachwhip
Side-blotched Lizard		Desert Horned Lizard	Speckled Rattlesnake
Long-tailed Brush Lizard		Desert Night Lizard	
Desert Horned Lizard		Western Whiptail	
Desert Night Lizard		Gila Monster	
Gilbert's Skink		Western Blind Snake	
Western Whiptail		Ring-necked Snake	
Gila Monster		Night Snake	
Glossy Snake		Common Kingsnake	
Western Shovel-nosed Snake		Coachwhip	
Ring-necked Snake		Gopher Snake	
Night Snake		Long-nosed Snake	
Common Kingsnake		Western Patch-nosed Snake	
Coachwhip		Sidewinder (nearby)	
Striped Whipsnake		Speckled Rattlesnake	
Spotted Leaf-nosed Snake			
Gopher Snake			
Long-nosed Snake			
Western Patch-nosed Snake			
Sidewinder			
Speckled Rattlesnake			
Mojave Rattlesnake			